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D.14 Socioeconomics, Services, and Utilities

Section D.14.1 provides a brief overview of the regional setting and approach to data collection used in this analysis. Section D.14.2 presents comprehensive baseline population, housing, and employment data, as well as information on utilities and public services along the Proposed Project route. Section D.14.3 provides the applicable socioeconomic regulations, plans, and standards associated with the project. Section D.14.4 provides the impact significance criteria and approach to impact assessment, while Sections D.14.5 through D.14.14 provide discussions of the environmental impacts and mitigation measures for the Proposed Project. Sections D.14.14 through D.14.19 provide discussions of the environmental impacts and mitigation measures for the alternatives to the Proposed Project routing. Finally, Section D.14.20 presents a mitigation monitoring, compliance, and reporting table. Analysis of alternatives along the Southwest Powerlink, Non-Wires Alternatives, System Alternatives, and the No Project/Action Alternative is presented in Section E.

D.14.1 Regional Setting and Approach to Data Collection

As illustrated in Section B.2, Overview of the Proposed Project, the study area includes the cities and counties located along the ROW and in the general surrounding geographic area from which the labor force would be drawn, including Imperial and San Diego Counties, California. In addition to incorporated and unincorporated county land and city land, the ROW also traverses Bureau of Land Management (BLM) land. Socioeconomic data were collected for jurisdictions in the vicinity of the Proposed Project that could potentially be affected and would contribute to the construction labor force. Regional and local socioeconomic information is presented in Sections D.14.2. Current demographic data are provided from the Year 2000 U.S. Census and the 2005 American Community Survey (based on 2000 Census data). Public services and utility information was collected from planning documents or other published information from the jurisdictions in the study area and SDG&E's Proponent's Environmental Assessment (PEA).

D.14.2 Environmental Setting for the Proposed Project

The Proposed Project would be constructed primarily by contract personnel, with SDG&E providing project administration and inspection. SDG&E also may use its own crews for certain portions of the work, as the schedule may require. It is anticipated that multiple contractors would be working concurrently on separate links of SRPL in order to meet the projected in-service date of spring 2010. According to the PEA, construction would commence as early as the first quarter 2008 and conclude before summer 2010. 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 800 individuals would be needed each month between October 2008 and December 2010, when the majority of foundation construction is anticipated. This is shown in Figure B-43 in The Project Description, which 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 (SDG&E, 2006).

The consistency of the Proposed Project with applicable plans and policies is addressed in Section D.16, where there is specific discussion of each item that was determined in the Appendix 2 screening process to warrant further evaluation. Appendix 2 (Policy Screening Report) lists all plans and policies applicable to the Proposed Project, and presents a preliminary screening evaluation of these policies.

D.14.2.1 Imperial Valley Link

The Imperial Valley Link would require that SDG&E obtain a new 200-foot ROW. The Proposed Project would require construction of 205 new 500 kV towers and 49.4 miles of new access roads for this link.

Demographics and Housing

Imperial County consists of 7 incorporated cities and 11 unincorporated communities. With a population of 144,523 people, it ranks as 32nd most populous out of California's 58 counties. San Diego County is the 3rd most populous county in California and consists of 18 incorporated cities and 28 unincorporated communities with a population of approximately 2.8 million people (SDG&E, 2006). Table D.14-1 identifies the year 2005 Census population and housing and employment statistics for the jurisdictions potentially affected by this link of the project route.

Table D.14-1. Demographic Characteristics – Imperial Valley Link			
Location	2005 Estimated Population	2005 Estimated Housing Units	2005 Estimated Employed
Imperial County	144,523	49,491 Vacancy Rate: 9.1% (4,504 units)	Labor Force: 57,864 persons Construction Occupations: 4,436 persons Unemployed: 5,847 persons
San Diego County	2,824,259	1,113,207 Vacancy Rate: 6.5% (72,669 units)	Labor Force: 1,414,090 persons Construction Occupations: 120,693 persons Unemployed: 75,361 persons
City of El Centro* (Imperial County)	37,835*	12,263* Vacancy Rate: 6.7% (824 units)	Labor Force: 14,862* persons Construction Occupations: 1,065 persons Unemployed: 1,065 persons

Source: U.S. Census 2000: 2005 American Community Survey, http://factfinder.census.gov accessed January 14, 2007.

The realty industry considers an average vacancy rate to be 5 percent. Imperial County has approximately 16,400 apartments and 1,425 hotel rooms located near the project. The majority of these are in incorporated cities such as El Centro, Imperial, Calexico, and Westmorland, which are east of the project area. Within the unincorporated communities of Heber and Seeley, located south and east of the project, there are approximately 140 apartment units. North of the Proposed Project, approximately 100 units are located in Salton City/Vista del Mar (SDG&E, 2006).

The Imperial Valley Link includes almost four miles of the proposed route in San Diego County. San Diego County has approximately 54,200 hotel rooms (SDG&E, 2006). Most of these units are located in the coastal region of the County; however, there are also rooms in the Borrego Springs area for tourists to the Anza Borrego Desert State Park.

The project would cross two large, sparsely populated Census Tracts. These are Census Tract 123.01, which encompasses most of western Imperial County, and Census Tract 210.00 in the eastern portion of San Diego County (SDG&E, 2006).

^{*} Year 2000 Census data are presented, because 2005 American Community Survey (ACS) data are not available for this geographic location.

Public Services and Utilities

The Imperial County Sheriff's Department is the primary law enforcement agency in Imperial County. The Sheriff's Department is composed of two divisions, the Patrol Division and the Corrections Division. The Patrol Division is supported by the Sheriff's Office dispatchers, who also provide dispatching for Emergency Medical Service (EMS) calls, the BLM, the Special Emergency Response Team, and other dispatching needs in the county. Correctional facilities include two jails staffed by the Corrections Division. The California Highway Patrol provides traffic service for the unincorporated areas of Imperial County. There are 18 fire stations within the county. These include the Imperial County Fire Department, city volunteer fire departments, and the El Centro Auxiliary Naval Station Fire Department.

Imperial County has four major hospitals and seven nursing homes. The hospitals provide acute care, rehabilitation facilities, an emergency department, and a variety of clinics and private physicians. The county has 16 school districts and 74 schools that include three adult education schools, three alternative schools, one community day school, five continuation schools, 38 elementary schools, nine high schools, six middle schools, and nine private schools. However, no schools are located in the vicinity of the project in this link.

The San Diego County Sheriff's Department is the primary law enforcement agency in San Diego County. The Sheriff's Department provides general and specialized regional law enforcement services to the entire county, whether the services are needed in incorporated cities within the county or in the unincorporated areas not serviced by a city law enforcement agency. The California Highway Patrol provides traffic service for the unincorporated areas of San Diego County. All police agencies respond to calls within their designated jurisdictions and, in extraordinary circumstances, assist in neighboring jurisdictions. There are 88 fire stations within the county. These include individual city and community fire departments, San Diego Rural Fire Protection District, the California Department of Forestry and Fire Protection, the U.S. Marine Corps Air Station Miramar Fire Department, and the U.S. Department of Agriculture Forest Service. Within Anza-Borrego Desert State Park, which begins at the western end of the Imperial Valley Link, the California Department of Parks and Recreation provides law enforcement and public safety services, sharing concurrent jurisdiction with the San Diego County Sheriff's Department and the California Highway Patrol (see Anza-Borrego Link below).

San Diego County has 40 major hospitals, two convalescent homes, 633 nursing homes, one rehabilitation hospital, one hospice, and three psychiatric/behavioral health institutions. The hospitals provide acute care, rehabilitation facilities, an emergency Department, and a variety of clinics and private physicians. The 42 school districts and 921 schools in San Diego County include 22 adult education schools, 20 alternative schools, 14 community day schools, 20 continuation schools, 409 elementary schools, 79 high schools, 88 middle schools, 12 K-12 schools, 244 private schools, and 13 special education schools (SDG&E, 2006). No schools would be located in the immediate vicinity of the proposed route in this link.

Table D.14-2 provides a summary of public service and utility data for cities and counties through which the Imperial Valley Link crosses.

Table D.14-2. Utility and Service Providers by Jurisdiction – Imperial Valley Link

Imperial County

Natural Gas & Electricity – IID and Southern California Gas Water and Wastewater – IID, Heber Public Utilities District, Salton Community Services District, and Coachella Valley Water District

Telecommunications – SBC and Cox Communications Fire Protection – Imperial County Fire Department, El Centro Auxiliary Naval Station Fire Department, and city volunteer fire departments

Police Protection – Imperial County Sheriff's Department and California Highway Patrol

Schools (in vicinity of Proposed Project) – None
Hospitals (along Proposed Project route) – None
Solid Waste (Landfills) – Waste Management, Inc. (WMI)
(Landfills include Brawley SWSF, Calexico SWSF, Holtville
SWSF, Hot Spa SWSF, Worthington SWSF, Niland SWSF,
Ocotillo SWSF, Palo Verde SWSF, Picacho SWSF, Salton City
SWSF, and Allied Imperial Landfill)

San Diego County

Natural Gas & Electricity - SDG&E

Water – San Diego County Water Authority (SDCWA) (from Metropolitan Water District of California)

Wastewater – County of San Diego Department of Public Works, Wastewater Management Section

Telecommunications – SBC and Cox Communications
Fire Protection – San Diego Rural Fire Protection District,
California Department of Forestry and Fire Protection, U.S.
MCAS Miramar Fire Department, and USDA Forest Service
Police Protection – San Diego County Sheriff's Department
and California Highway Patrol

Schools (in vicinity of Proposed Project) – None Hospitals (along Proposed Project route) – None

Solid Waste (Landfills) – WMI, Pacific Waste Services, Allan Company, Daily Disposal Services, Inc., Debris Box, Dependable Disposal and Recycling, Emerald Waste and Recovery, Inc., Express Waste and Roll-Off Services, John Smith Earthworks, Inc., Tayman Industries, Ware Disposal Company, Inc., Coast Waste Management, Inc., Jones Disposal, Inc., Reliable Waste, Inc., Waste Management of North County, Inc., Waste Management of San Diego, Sonny DiVello's All American Disposal, Inc., King Business Services, Inc., Shubin Services, Inc., Solag Disposal, Inc., Ware Disposal Company, Inc., and Diamond Environmental (Landfills include Ramona Landfill, Borrego Springs Landfill)

Source: SDG&E, 2006.

Imperial Irrigation District is the major water provider in Imperial County. IID has 3.1 million acrefoot of Colorado River annual entitlement. The 82-mile All American Canal delivers approximately 2.321 billion gallons per day of Colorado River water to Imperial County. The Westside Main Canal supplies 775,526,400 gallons/day of water and the East Highland Canal supplies 1,647,993,600 gallons/day (IID, 2007). As shown in Table B-4b in Section B, water for concrete would be obtained from batch plants in El Centro, Seeley, or Brawley or a temporary batch plant set up in Ocotillo Wells, water for dust control and minor grading would be obtained from IID canals, and de-ionized water for maintenance would be obtained from the IID power plant in El Centro. Nine truck trips per day with an estimated round-trip haul mileage between 22 to 50 miles are estimated during construction to supply water. The City of El Centro's water system has a capacity of approximately 13.5 million gallons per day (mgd) (City of El Centro, 2006).

In San Diego County, the San Diego County Water Authority (SDCWA) provides up to 97 percent of the water used in the county, importing from a single supplier, the Metropolitan Water District of Southern California. Most of this water is obtained from the Colorado River and northern California through a massive system of pipes and aqueducts. The SDCWA delivers 569 million gallons of water per day to San Diego County businesses and residents. Nearly 300 miles of large-diameter pipelines in two major aqueducts throughout the county deliver the water to the 23 SDCWA member agencies (SDG&E, 2006).

One acre-foot is equal to 325,900 gallons, which is enough to sustain the water needs of a family of five for one year.

The Proposed Project would parallel, cross, or would be adjacent to the following existing utilities and facilities in the Imperial Valley Link:

- SDG&E Southwest Powerlink (SWPL) Imperial Valley–Miguel 500 kV transmission line (MP 0 to MP 4)
- Imperial Irrigation District (IID) Dixieland Substation (MP 7.5)
- California Aqueduct Pump Station (MP 9)
- IID Westside Main Canal and other irrigation canals (several crossings within the Imperial Valley agricultural lands from MP 5 to MP 20)
- IID 161 kV transmission line (MP 20 to MP 41)
- IID 92 kV transmission lines (MP 47.2 to MP 50.2 and MP 54 to MP 60.9)
- IID Anza 92 kV Substation (MP 47.2 where the route turns south from SR78)
- IID San Felipe 92 kV Substation (MP 58.8).

D.14.2.2 Anza-Borrego Link

Demographics and Housing

The Anza-Borrego Link consists of 22.6 miles within Anza-Borrego Desert State Park (ABDSP). The Proposed Project would parallel much of an existing ROW within ABDSP, but would require that SDG&E obtain a 150-foot ROW or widen the existing ROW by at least 50 feet. While existing access roads would be used along most of the Anza-Borrego Link, eight miles of new access roads would be required.

Because this link of the Proposed Project would be located entirely within ABDSP, no permanent population is located along the route. However, ABDSP is visited by approximately one million people annually. Table D.14-1, presented under Imperial Valley Link above, identifies the 2005 population, housing, and employment statistics within San Diego County, where Anza-Borrego Desert State Park is located. San Diego County had a population of approximately 2.8 million people, with 8.5 percent of workers in construction occupations and a 6.5 percent housing vacancy rate (U.S. Census, 2005).

Although San Diego County has approximately 54,200 hotel rooms located within the county, most of these units are located in the coastal region. Rooms are also located in Borrego Springs. According to the U.S. Census, there are 2,280 housing units in Borrego Springs, of which 1,127 are considered vacant. However, 865 of the 1,127 vacant units (77 percent) are used for seasonal, recreational, or occasional use (U.S. Census, 2000). The project would cross Census Tract 210.00 in eastern San Diego County (SDG&E, 2006).

Public Services and Utilities

Table D.14-2 above provides public service and utility data for the County of San Diego, where ABDSP is located. The California Department of Parks and Recreation (CDPR) provides law enforcement and public safety services within the Anza-Borrego Link through Anza-Borrego Desert State Park. CDPR shares concurrent jurisdiction with the San Diego County Sheriff's Department and the California Highway Patrol. Water within ABDSP is obtained via groundwater wells. Most campgrounds, such as Tamarisk Grove, have their own individual wells. Water for use during construction would need to be obtained from wells in the area or would likely be trucked in to the project area from a batch plant at Central East Substation during project construction (for concrete mixing, dust control, watering

after minor grading activities, etc.). The batch plant would operate on water supplied by VID wells by way of a temporary pipe system or holding ponds at the substation site. In 2005-2006, Vista Irrigation District (VID) distributed and sold a total of 21,885 acre-foot (7.1 billion gallons) (VID, 2007b) and it currently supplies an average of approximately 20 mgd to its service territory from a dozen or so wells (VID, 2007a). VID receives its water from Lake Henshaw, and since 1954 it has also been joined with the San Diego County Water Authority so that it could receive imported water from northern California and the Colorado River, as needed. Approximately half of VID's water is supplied locally from Lake Henshaw (VID, 2007b).

De-ionized water for maintenance would be obtained from the IID power plant in El Centro. The City of El Centro's water system has a capacity of approximately 13.5 million gallons per day (mgd) (City of El Centro, 2006). Overall, project construction would require four water truck trips per day with an estimated round trip haul mileage of 70 miles.

The Proposed Project would parallel, cross, or be adjacent to the following existing utilities and facilities:

- IID San Felipe-Narrows 92 kV transmission line (MP 60.9 to MP 69.7). This existing 92 kV line would be underbuilt on the new 500 kV towers along Old Kane Springs Road and/or relocated underground in the Park along SR78
- Existing underground utilities within SR78 during the proposed 69 kV (MP 69.7 to MP 74.8) and 92 kV (MP 68.2 to MP 69.7) underground relocation segments
- SDG&E Narrows Substation (MP 69.7)
- SDG&E Borrego-Narrows-Warners 69 kV transmission line (MP 69.7 to MP 83.5). This existing 69 kV line would be relocated underground in SR78 and/or underbuilt on the new 500 kV towers in the area of Grapevine Canyon in the Park.

There are no existing underground utilities within SR78 during the proposed 69 kV (MP 69.7 to MP 74.8) and 92 kV (MP 68.2 to MP 69.7) underground relocation segments.

D.14.2.3 Central Link

Demographics and Housing

The Proposed Project within the Central Link would be 27.3 miles long and would include 7.4 miles of 500 kV line from ABDSP to Central East Substation and 19.9 miles of 230 kV line in and around the Santa Ysabel Valley. Land ownership along the Central Link is: Vista Irrigation District (8.7 miles), private property (11.1 miles), and SDG&E (1.0 miles). The route would pass adjacent to the Santa Ysabel Band of Diegueño Mission Indians Reservation east of SR79 and just outside of the Cleveland National Forest (CNF). In the Central Link, the Proposed Project would cross Census Tracts 210.00, 209.03, and 209.04.

Table D.14-1 identifies the 2005 American Community Survey Census population, housing, and employment statistics for San Diego County, where the Central Link is located. There are approximately 54,200 hotel rooms in San Diego County (SDG&E, 2006). Most of these units are located in the coastal region of the county.

Public Services and Utilities

Table D.14-2 provides public service and utility data for the County of San Diego. The San Diego County Water Authority (SDCWA) provides up to 97 percent of the water used in the San Diego County region, importing from a single supplier, the Metropolitan Water District of Southern California (SDG&E, 2006). As shown in Table B-4b in Section B, water for concrete would be obtained from a temporary batch plant at the Central East Substation site that would operate on water supplied by VID wells by way of a temporary pipe system or holding ponds at the substation site. Water for dust control and grading would be obtained from VID and diluted de-ionized water for maintenance (e.g., insulator cleaning) would be obtained from SDG&E's Kearny O&M District. Water from the local municipal water supply would also be used. Six truck trips per day with an estimated round trip haul mileage of 38 miles would be required to supply water during construction. In 2005-2006, Vista Irrigation District (VID) distributed and sold a total of 21,885 acre-foot (7.1 billion gallons) (VID, 2007b) and it currently supplies an average of approximately 20 mgd to its service territory from a dozen or so wells (VID, 2007a). VID receives its water from Lake Henshaw, and since 1954 it has also been joined with the San Diego County Water Authority so that it could receive imported water from northern California and the Colorado River, as needed. Approximately half of VID's water is supplied locally from Lake Henshaw (VID, 2007b).

The Proposed Project would parallel, cross, or would be adjacent to the following existing utilities and facilities:

- SDG&E Narrows-Warners 69 kV transmission line (MP 83.5 to MP 87.6)
- SDG&E Warners-Santa Ysabel 69 kV transmission line (MP 97.6 to MP 100.2). It should be noted that the existing 69 kV transmission line would be relocated and underbuilt in the Proposed Project ROW from MP 100.2 to MP 109.4
- SDG&E Santa Ysabel Substation (MP 108).

D.14.2.4 Inland Valley Link

Demographics and Housing

The 25.5-mile project route for this link would extend from southwest of Santa Ysabel to the existing Sycamore Canyon Substation on the north edge of Marine Corps Air Station Miramar. Jurisdictions along the Inland Valley Link include the BLM, U.S. Forest Service, CDFG, DOD, Caltrans, County of San Diego, City of San Diego, and Ramona Municipal Water District. Existing uses include residential, public facilities and utilities, and parks and recreation. Much of the Inland Valley Link would parallel existing 69 kV transmission lines, but 13 miles of new ROW would need to be acquired, ranging from 60 feet for the 4.7-mile underground segment to 200 feet in width.

Table D.14-3 identifies the year 2000 Census population, housing, and employment statistics for San Diego County, the communities of Ramona and San Diego Country Estates, and the City of San Diego.

For the Inland Valley Link, the Proposed Project would cross San Diego County, including the unincorporated communities of San Diego Country Estates and Ramona, within the following Census Tracts: 209.04, 208.01, 208.08, 208.09, 208.06, 169.01, 169.02, 170.10, and 95.04 (SDG&E, 2006).

Table D.14-3. Demographic Characteristics – Inland Valley Link

Location	2005 Estimated Population	2005 Estimated Housing Units	2005 Estimated Employment
San Diego County	2,824,259	1,113,207 Vacancy Rate: 6.5% (72,669 units)	Labor Force: 1,414,090 persons Construction Occupations: 120,693 persons Unemployed: 75,361 persons
Ramona* (San Diego County)	15,691*	5,131* Vacancy Rate: 2.1% (110 units)	Labor Force: 7,649* persons Construction Occupations: 1,154 persons Unemployed: 398 persons
San Diego Country Estates* (San Diego County)	9,262*	3,102* Vacancy Rate: 3.5% (110 units)	Labor Force: 4,612* persons Construction Occupations: 398 persons Unemployed: 162 persons
City of San Diego (San Diego County)	1,208,331	501,852 Vacancy Rate: 7.0% (35,273 units)	Labor Force: 630,365 persons Construction Occupations: 41,317 persons Unemployed: 36,074 persons

^{*} Year 2000 Census data are presented, because 2005 American Community Survey (ACS) data are not available for this geographic location. Sources: SDG&E, 2006 and U.S. Census 2000: 2005 American Community Survey, http://factfinder.census.gov accessed April 3, 2007.

For the Inland Valley Link, the Proposed Project would cross San Diego County, including the unincorporated communities of San Diego Country Estates and Ramona, within the following Census Tracts: 209.04, 208.01, 208.08, 208.09, 208.06, 169.01, 169.02, 170.10, and 95.04 (SDG&E, 2006).

Public Services and Utilities

Table D.14-4 provides public service and utility data for cities and counties through which the Inland Valley Link crosses.

Table D.14-4. Utility and Service Providers by Jurisdiction – Inland Valley Link

San Diego County	
Natural Gas & Electricity – SDG&E Water – San Diego County Water Authority (SDCWA) (from Metropolitan Water District of California) Wastewater – County of San Diego Department of Public Works, Wastewater Management Section Telecommunications – SBC and Cox Communications Fire Protection – San Diego Rural Fire Protection District, California Department of Forestry and Fire Protection, U.S. Marine Corps Air Station Miramar Fire Department, and U.S. Department of Agriculture Forest Service Police Protection – San Diego County Sheriff's Department and California Highway Patrol Schools (in vicinity of Proposed Project) – None Hospitals (along Proposed Project route) – None	Solid Waste (Landfills) – WMI, Escondido Disposal Corporation, Pacific Waste Services, Allan Company, Daily Disposal Services, Inc., Debris Box, Dependable Disposal and Recycling, Emerald Waste and Recovery, Inc., Express Waste and Roll-Off Services, John Smith Earthworks, Inc., Tayman Industries, Ware Disposal Company, Inc., Coast Waste Management, Inc., Jones Disposal, Inc., Reliable Waste, Inc., Waste Management of North County, Inc., Waste management of San Diego, Sonny DiVello's All American Disposal, Inc., King Business Services, Inc, Shubin Services, Inc., Solag Disposal, Inc., Ware Disposal Company, Inc., and Diamond Environmental (Landfills include Ramona Landfill, Sycamore Sanitary Landfill, and Las Pulgas Landfill)
Ramona (unincorporated)	
Natural Gas & Electricity – SDG&E Water – Ramona Municipal Water District Wastewater – Santa Maria Reclamation Plant and San Vicente Wastewater Treatment Plant Telecommunications – SBC and Cox Communications Fire Protection – Ramona Fire Department and Intermountain Fire and Rescue Police Protection – Ramona Sheriff's Department (component of San Diego County Sheriff's Department) and California Highway Patrol	Schools (in vicinity of Proposed Project) – Barnett Elementary School Hospitals (along Proposed Project route) – None Solid Waste (Landfills) – WMI, Escondido Disposal Corporation, and Allied Waste. (Landfills include Ramona Landfill)

Table D.14-4. Utility and Service Providers by Jurisdiction – Inland Valley Link

City of San Diego

Natural Gas & Electricity - SDG&E

Water – San Diego Municipal Water District
Wastewater – City of San Diego Metropolitan Wastewater
Dept
Telecommunications – SBC and Cox Communications
Fire Protection – San Diego Fire Department
Police Protection – San Diego Police Department
Schools (in vicinity of Proposed Project) – None

Hospitals (along Proposed Project route) – None

Solid Waste (Landfills) – WMI, Escondido Disposal Corporation, Pacific Waste Services, Allan Company, Daily Disposal Services, Inc., Debris Box, Dependable Disposal and Recycling, Emerald Waste and Recovery, Inc., Express Waste and Roll-Off Services, John Smith Earthworks, Inc., Tayman Industries, and Ware Disposal Company, Inc. (Landfills include Ramona Landfill, Sycamore Sanitary Landfill, San Onofre Landfill, and Las Pulgas Landfill)

Source: SDG&E, 2006.

The San Diego County Water Authority (SDCWA) provides up to 97 percent of the water used in the San Diego County region, importing from a single supplier, the Metropolitan Water District (MWD) of Southern California (SDG&E, 2006).

The San Diego Municipal Water District provides water distribution services to the City of San Diego, supplying approximately 324.2 mgd based on plant capacities and an average of 220.45 mgd (City of San Diego, 2007). Water is acquired from the SDCWA water system (approximately 90 percent), local surface water sources, and recycling plants; and a small amount is obtained from the Lake Skinner Treatment Plant in Rancho, California. The water district also maintains and operates the sewer collection system within the city.

The San Diego River System is comprised of four reservoirs, their watersheds, interconnecting water pipelines, and the Alvarado Water Treatment Plant. The four watersheds of the San Diego River System have a combined area of 205,140 acres, or approximately 321 square miles (City of San Diego, 2005).

The Ramona Municipal Water District (RMWD) provides water distribution services to Ramona, supplying approximately 3.6 billion gallons per year. Water is supplied for both residential and agricultural use from three sources: a district-owned well field, Sutherland Reservoir, and the SDCWA. The primary function of the Sutherland Reservoir is to store local runoff water from the Sutherland Watershed, which is part of the San Diego River System. Water stored in Sutherland Reservoir can be transferred to San Vicente Reservoir via the Sutherland-San Vicente pipeline. The Sutherland Reservoir also provides emergency storage for RMWD (City of San Diego, 2005).

Sewer service is provided to Ramona customers through two treatment plants: the Santa Maria Reclamation Plant, which serves the downtown Ramona area and the San Vicente Wastewater Treatment Plant, which serves the San Diego Country Estates (SDG&E, 2006). The Poway Municipal Water District provides water distribution services to the City of Poway, supplying approximately 4.2 billion gallons per year that is purchased from the SDCWA water system. The City of Poway supplies a daily theoretical maximum of 24 mgd (actual maximum is 22 mgd) and an average of 16 mgd (City of Poway, 2007). The water district also maintains and operates the sewer collection system within the city.

As shown in Table B-4b in Section B, the Inland Valley Link would receive water for concrete from already operating batch plants supported by municipal water supply operating near or in the Cities of Ramona and Poway. Water for dust control and minor grading would be obtained from Ramona Municipal Water District and/or City of Poway Public Services. De-ionized water for maintenance would be obtained from SDG&E Kearny O&M District. Project construction would require three water truck trips per day with an estimated round trip haul distance of 50 miles.

The Proposed Project would parallel, cross, or would be adjacent to the following utilities and facilities in the Inland Valley Link:

- SDG&E Santa Ysabel-Creelman 69 kV transmission line (MP 110.8 to the underground transition at MP 117.2, except for a one-mile re-route near MP 111.3 to avoid Cleveland National Forest)
- Existing underground utilities within the Mount Gower Open Space Preserve access road, Gunn Stage Road, and/or San Vicente Road during the proposed underground segment (MP 117.2 to MP 121.9)
- San Diego Country Estates Pump Station (MP 120)
- San Vicente Wastewater Treatment Plant (MP 121.4)
- SDG&E Creelman–Los Coches 69 kV transmission line (cross at MP 122.4)
- SDG&E Creelman–Sycamore Canyon 69 kV transmission line (MP 123.3 to MP 136.3).

D.14.2.5 Coastal Link

Demographics and Housing

Jurisdictions along the Coastal Link include DOD, Caltrans, County of San Diego, City of San Diego, and City of Poway. Uses include residential, public facilities and utilities, commercial and office, industrial, and parks and recreation. Table D.14-5 identifies the year 2005 Census population, housing, and employment statistics for the Cities of San Diego and Poway within the Coastal Link, which are located in San Diego County.

Table D.14-5. Demographic Characteristics – Coastal Link				
Location	2005 Estimated Population	2005 Estimated Housing Units	2005 Estimated Employment	
San Diego County	2,824,259	1,113,207 Vacancy Rate: 6.5% (72,669 units)	Labor Force: 1,414,090 persons Construction Occupations: 120,693 persons Unemployed: 75,361 persons	
City of San Diego (San Diego County)	1,208,331	501,852 Vacancy Rate: 7.0% (35,273 units)	Labor Force: 630,365 persons Construction Occupations: 41,317 persons Unemployed: 36,074 persons	
City of Poway* (San Diego County)	48,044*	15,714* Vacancy Rate: 1.6% (247 units)	Labor Force: 24,133* persons Construction Occupations: 1,723 persons Unemployed: 791 persons	

^{*} Year 2000 Census data are presented, because 2005 American Community Survey (ACS) data are not available for this geographic location. Source: U.S. Census 2000: 2005 American Community Survey, http://factfinder.census.gov accessed April 3, 2007.

In the Coastal Link, the Proposed Project would cross unincorporated San Diego County and into the Cities of Poway and San Diego within or adjacent to 14 Census Tracts: 95.04, 170.45, 170.44, 170.43, 170.42, 170.39, 170.37, 170.18, 170.36, 83.38, 83.37, 83.46, 83.34, and 83.33 (SDG&E, 2006).

Public Services and Utilities

Table D.14-6 provides public service and utility data for the Cities of San Diego and Poway. Table D.14-4 provides public service and utility data for the County of San Diego.

Table D.14-6. Utility and Service Providers by Jurisdiction – Coastal Link

City of San Diego

Natural Gas & Electricity – SDG&E
Water – San Diego Municipal Water District
Wastewater – City of San Diego Metropolitan Wastewater Dept
Telecommunications – SBC and Cox Communications
Fire Protection – San Diego Fire Department
Police Protection – San Diego Police Department
Schools (in vicinity of Proposed Project) – Thurgood
Marshall Middle School, Dingeman Elementary School, Ellen
Browning Scripps Elementary School, KinderCare Learning
Center, and Sage Canyon Elementary School

Hospitals (along Proposed Project route) – None Solid Waste (Landfills) – WMI, Escondido Disposal Corporation, Pacific Waste Services, Allan Company, Daily Disposal Services, Inc., Debris Box, Dependable Disposal and Recycling, Emerald Waste and Recovery, Inc., Express Waste and Roll-Off Services, John Smith Earthworks, Inc., Tayman Industries, and Ware Disposal Company, Inc. (Landfills include Otay Landfill, West Miramar Sanitary Landfill, Sycamore Sanitary Landfill, San Onofre Landfill, and Las Pulgas Landfill)

City of Poway

Natural Gas & Electricity – SDG&E
Water – Poway Municipal Water District
Wastewater – Poway Municipal Water District
Telecommunications – SBC and Cox Communications
Fire Protection – Poway Fire Department
Police Protection – City of Poway Sheriff's Department

Schools (in vicinity of Proposed Project) – None Hospitals (along Proposed Project route) – None Solid Waste (Landfills) – Escondido Disposal Corporation. (Landfills include Sycamore Sanitary Landfill)

Source: SDG&E, 2006.

The San Diego County Water Authority (SDCWA) provides up to 97 percent of the water used in the San Diego County region, importing from a single supplier, the Metropolitan Water District of Southern California (SDG&E, 2006).

The San Diego Municipal Water District provides water distribution services to the City of San Diego, supplying approximately 324.2 mgd based on plant capacities and an average of 220.45 mgd (City of San Diego, 2007). Water is acquired from the SDCWA water system (approximately 90 percent), local surface water sources, and recycling plants; and a small amount is obtained from the Lake Skinner Treatment Plant in Rancho, California. The water district also maintains and operates the sewer collection system within the city (SDG&E, 2006).

As shown in Table B-4b in Section B, the Coastal Link would receive water for concrete from already operating batch plants supported by municipal water supply operating near or in the City of San Diego. Depending on location, water for dust control and minor grading would be obtained from the City of San Diego Water District or other local municipal water supply. It is assumed that all water could be supplied by the San Diego Water District if necessary. De-ionized water for maintenance would be obtained from SDG&E Kearny O&M District. Project construction would require two water truck trips per day with an estimated round trip haul distance of 28 miles.

The Proposed Project would parallel, cross, or be adjacent to the following utilities and facilities in the Coastal Link within the Cities of Poway and San Diego:

- SDG&E Sycamore Canyon Substation (MP 136.3)
- SDG&E Sycamore Canyon-Chicarita 69 kV, 138 kV, and 230 kV transmission line corridor (MP 136.3 to MP 142.3). Note that under the Proposed Project, the new 230 kV transmission line would be constructed on double-circuit steel poles and the existing 138 kV circuit would be relocated to the new 230 kV poles. The existing 138 kV H-frame structures would be removed.
- SDG&E Chicarita Substation (MP 142.3)
- Existing underground utilities within SDG&E's vacant ROW and/or Park Village Drive during the proposed underground segment (MP 142.3 to MP 146.6)

- SDG&E Chicarita-Peñasquitos two 69 kV and one 138 kV circuits (MP 146.6 to MP 149.9). The second 69 kV circuit would be removed and relocated to the new 230 kV structures and the H-frame structures that originally supported the 69 kV circuit would be removed.
- Peñasquitos Substation (MP 149.9).

D.14.3 Applicable Regulations, Plans, and Standards

Federal

National Environmental Policy Act (NEPA)

Under NEPA (42 United States Code (USC) 4321 et seq.), an EIS must include an analysis of the Proposed Project's economic, social, and demographic effects related to effects on the natural or physical environment in the affected area, but does not allow for economic, social, and demographic effects to be analyzed in isolation from the physical environment. Section F.1 of this EIR/EIS addresses and analyzes any potential Environmental Justice concerns.

State

California Environmental Quality Act (CEQA)

Title 14 of the California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act, Article 9(a), Section 15131, states the following with regard to economic and social effects:

- (a) Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.
- (b) Economic or social effects of a project may be used to determine the significance of physical changes caused by the project. For example, if the construction of a new freeway or rail line divides an existing community, the construction would be the physical change, but the social effect on the community would be the basis for determining that the effect would be significant. As an additional example, if the construction of a road and the resulting increase in noise in an area disturbed existing religious practices in the area, the disturbance of the religious practices could be used to determine that the construction and use of the road and the resulting noise would be significant effects on the environment. The religious practices would need to be analyzed only to the extent to show that the increase in traffic and noise would conflict with the religious practices. Where an EIR uses economic or social effects to determine that a physical change is significant, the EIR shall explain the reason for determining that the effect is significant.
- (c) Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR. If information on these factors is not contained in the EIR, the information must be added to the record in some other manner to allow the agency to consider the factors in reaching a decision on the project.

Section F.1 of this EIR/EIS addresses and analyzes any potential Environmental Justice concerns.

Protection of Underground Infrastructure

The responsibilities of California utility operators working in the vicinity of utilities are detailed in Section 1, Chapter 3.1, "Protection of Underground Infrastructure" (Article 2 of California Government Code §§4216-4216.9). This law requires that an excavator must contact a regional notification center at least two days prior to excavation of any subsurface installation. Any utility provider seeking to begin a project that may damage underground infrastructure can call Underground Service Alert, the regional notification center. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area.

California Integrated Waste Management Board Solid Waste Policies, Plans, and Regulations

The Integrated Waste Management Act of 1989 (PRC 40050 et seq. or Assembly Bill (AB 939, codified in PRC 40000), administered by the California Integrated Waste Management Board (CIWMB), requires all local and county governments to adopt a Source Reduction and Recycling Element to identify means of reducing the amount of solid waste sent to landfills. This law set reduction targets at 25 percent by the year 1995 and 50 percent by the year 2000. To assist local jurisdictions in achieving these targets, the California Solid Waste Reuse and Recycling Access Act of 1991 (SWRR) requires all new developments to include adequate, accessible, and convenient areas for collecting and loading recyclable and green waste materials.

Local

The municipal plans for the Cities of San Diego and Poway, as well as plans for a number of the parks and recreational facilities within the project study area, have a variety of goals and policies. The plans generally describe the municipalities' provision and management of fire and police protection services and activities, water and sewer systems, and the visual and safety aspects of the location of utilities, in particular the siting of utility lines. The provision of fire and police protection services is described within the plans for local jurisdictions, and general goals and policies are laid out for these services; however, none directly address the public service issues associated with the Proposed Project.

In Imperial County, the Proposed Project would affect only unincorporated areas. However, in San Diego County, the Proposed Project would affect unincorporated county areas as well as the incorporated Cities of San Diego and Poway. The relevant polices of each of these jurisdictions are summarized below.

Imperial County

The General Plan for Imperial County includes a Housing Element (Imperial County, 2000). Section Three of the Housing Element provides goals for housing, and identifies objectives and policies to achieve each goal, which include:

- Housing Demand and Accessibility. *Goal 1*: Ensure the provision of housing sites in suitable locations and with adequate services which collectively accommodate a range of housing types, sizes, and prices meeting the needs of all economic segments of the county's population.
- Housing Supply and Affordability. *Goal 2*: Provide the opportunity to obtain affordable housing which is safe, decent, and sanitary and within a suitable living environment with reasonable accessibility to employment.

• Housing Opportunities. *Goal 3:* Ensure that housing opportunities are available to all income groups in all communities without discrimination on the basis of race, religion, ethnicity, sex, age, marital status, or household composition.

San Diego County

San Diego Association of Governments Regional Comprehensive Plan (RCP)

San Diego Association of Governments (SANDAG) Regional Comprehensive Plan (RCP) is the long-term planning framework for the San Diego region. The RCP is intended to provide a broad context in which local and regional decisions can be made to foster a healthy environment, a thriving economy, and a high quality of life for all residents.

The Social Equity and Environmental Justice chapter of the RCP addresses the concept of social equity in the San Diego region with a planning vision to provide all residents with access to affordable and safe housing, quality jobs, adequate infrastructure, and quality education. The RCP recommends that industries and high-traffic corridors be sited in a way to minimize potential impacts of poor air quality on homes, schools, hospitals, and other land uses where people congregate, and recommends that programs be implemented to ensure that low-income and minority populations are not disproportionately negatively affected. The RCP policy direction ensures that in the future, all communities move forward as the region moves forward because many communities in San Diego have traditionally been left behind or excluded from the planning and development process, including low-income and minority communities. Section HF.1 of this EIR/EIS addresses and analyzes any potential Environmental Justice concerns.

The RCP identifies the severe shortage of housing in the San Diego region, and discusses that many lower income households, which make up 44.2 percent of the San Diego region population, need some form of subsidy to afford housing. The Housing chapter of the RCP provides policy direction toward development of housing in the San Diego region to minimize projected interregional and long distance commuting and to rezone appropriate sites to allow for redevelopment or higher density development.

San Diego County Construction and Demolition Debris Ordinance

The San Diego County construction and demolition debris ordinance, effective April 21, 2007, is designed to divert debris from construction and demolition projects away from landfill disposal in the unincorporated County of San Diego. The ordinance requires that 90 percent of inerts (non-biodegradable products) and 70 percent of all other materials must be recycled. The ordinance applies to all construction, demolition, or renovation projects 40,000 square feet or greater. The applicant must submit a Construction and Demolition Debris Management Plan and refundable Performance Guarantee prior to building permit issuance.

Environmental Impacts and Mitigation Measures for the Proposed Project

D.14.4 Significance Criteria and Approach to Impact Assessment

Section D.14.4.1 presents the significance criteria on which impact determinations are based. In addition, Section D.14.4.2 lists the Applicant Proposed Measures (APMs) relevant to socioeconomic concerns, and Section D.14.4.3 lists socioeconomic, public services, and utilities impacts identified for the Proposed Project and alternatives.

D.14.4.1 Significance Criteria

NEPA provides no specific thresholds of significance for socioeconomic impact assessment. Significance varies, depending on the context of the proposed action (40 CFR 1508.27[a]), but 40 CFR 1508.8(b) states that indirect effects may include those that are growth inducing and others related to induced changes in the pattern of land use, population density, or growth rate. CEQA Guidelines do not contain a discussion of significance criteria for economic impacts, which in themselves are not considered significant effects on the environment, and thus no significance criteria are established. Significance criteria for socioeconomics impacts are presented below.

Socioeconomic, public services and utilities impacts would be considered significant if the Proposed Project would:

- 1. Cause a substantial change in revenue for local businesses, government agencies, or Indian tribes;
- 2. Disrupt existing utility systems or cause a collocation accident;
- 3. Require the construction of new public service facilities or require the expansion of existing facilities to accommodate an increased need for fire protection, police protection, schools, or other public services, including water, wastewater and/or solid waste facilities;
- 4. Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere;
- 5. Cause substantial change in local employment or labor force;
- 6. Conflict with applicable land use plans and policies associated with socioeconomics (including public services or utilities); and/or
- 7. Cause a substantial decrease in property values.

D.14.4.2 Applicant Proposed Measures

Applicant Proposed Measures (APMs) were identified by SDG&E in its application to the CPUC. Table D.14-7 presents the APMs that are relevant to this section. The impact analysis completed for this EIR/EIS assumes that all APMs would be implemented as described. Additional resource evaluation and mitigation measures are recommended in this section if it is determined that APMs would not fully address the impacts for which they are presented.

APM Number	Description
PSU-APM-1	SDG&E has and will continue to coordinate with all utility providers with facilities located within or adjacent to the Proposed Project to ensure that design does not conflict with other facilities. In the event of a conflict, the project will be aligned vertically and/or horizontally as appropriate to avoid other utilities and provide adequate operational and safety buffering. Alternately, the other existing facilities may be relocated. Long-term operations and maintenance of the project will be negotiated through easement, purchased right-of-way, franchise agreement, or joint use agreement.
PSU-APM-2	Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines.
PSU-APM-3	SDG&E will coordinate construction schedules, lane closures, and other activities with installation of the project with emergency and police services to ensure that disruption to response times and access is minimized.

APM Number	Description		
APM LU-1	SDG&E will provide advance notice to residents, property owners, and tenants within 300 feet of construction activities and will appoint a public affairs officer to address public concerns or questions.		
APM LU-3	 Farmers (or other applicable parties) will be compensated for project-related losses of crops or other pertinent agricultural resources based upon a professional appraisal. 		
	Construction activities in croplands or other applicable agricultural areas will be scheduled to minimize or avoid planting, growing, harvesting, or other appropriate seasons to the extent feasible.		
APM LU-5	To remedy encroachment, operation and safety conflicts with irrigation canals and drains during construction, SDG&E will coordinate construction activities with appropriate water management representatives and agricultural operators.		
APM LU-6	The limits of construction activities within and outside the ROW will typically be predetermined, with activity restricted to and confined within those limits. The ROW boundary and limits of construction activity inside and outside the ROW will be flagged in agricultural use and sensitive agricultural resource areas to alert construction personnel that disturbance to those areas should be minimized or avoided.		
APM LU-7	To the extent feasible, project facilities will be installed along the edges or borders of agricultural use and sensitive agricultural resource areas to avoid fragmentation and operational effects. When it is not feasible to locate Project facilities along such borders, SDG&E will consult with affected property owners/operators to identify facility locations that create the least potential impact to property/operations, and that are mutually acceptable to property owners/operators to the extent feasible. SDG&E would pay just compensation to affected property owners based upon the impact to the property caused by the facility locations identified by SDG&E.		
APM LU-10	SDG&E will match structure locations with existing transmission facilities where feasible and appropriate.		
WQ-APM-6	 Designated surface water protection areas (source water) will be avoided where feasible. There will be no diversions, detention, retention or consumption of surface waters for the project. Prior to construction, interviews would take place with affected landowners regarding location of water supply wells located on their property. SDG&E will negotiate with affected landowners to provide alternative water supplies in the event a supply well or springs dry up directly caused by project activities. Negotiation shall be by either a remedial cash payment to the landowner or by SDG&E contracting for the drilling of a replacement well 		

Source: SDG&E, 2006.

D.14.4.3 Impacts Identified

Table D.14-8 lists the socioeconomic, services, and utility impacts identified for the Proposed Project and alternatives, 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 and cannot be mitigated to a level that is less than significant), Class II (significant but can be mitigated to a level that is less than significant), or Class IV (beneficial).

Table D.14-8. Impacts Identified – Proposed Project – Socioeconomics, Services, and Utilities					
Impact No.	Description	Impact Signifi- cance			
Propose	Proposed Project				
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class I, II, III, IV			
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II, III			
S-3	Project construction and operation would increase the need for public services and facilities	Class II, III			
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV			

Table D.	14-8. Impacts Identified – Proposed Project – Socioeconomics, Services, and Utilities	3
Impact No.	Description	Impact Signifi- cance
S-5	Presence of the project would decrease property values	Class III
Proposed	d Project – Future Transmission System Expansion	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class I, II, III, IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II
S-3	Project construction and operation would increase the need for public services and facilities	Class II, III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
Proposed	d Project – Connected Actions	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class III, IV
S-1CA	Labor force requirements would create a substantial demand for labor or a change in local employment	Class IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II, III
S-2CA	Construction workers would require housing that exceeds the supply of local housing or temporary housing facilities	Class III
S-3	Project construction and operation would increase the need for public services and facilities	Class I, II, III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III

Effects Found to Have No Impact

Three types of potential impacts have been identified that pertain to socioeconomics and services and utilities based on the significance criteria; however, these impacts would not be expected to occur as a result of the Proposed Project. Therefore, they are not considered further. The following discussions are based on CEQA significance criteria:

Would existing housing or persons would be displaced, necessitating the construction of replacement housing elsewhere? The Proposed Project would involve the construction of a new 150-mile transmission line between SDG&E's existing Imperial Valley and Peñasquitos Substations and construction of a new Central East 500/230 kV Substation. The project route does not contain any habitable housing structures and would not require the removal of any housing units. While residential developments occur adjacent to the route, all project elements would be constructed on a combination of existing ROWs, new ROWs adjacent to existing ROWs, and new ROWs on undeveloped land that would not require the removal or relocation of any residential units or businesses. Therefore, no persons or housing would be displaced and no replacement housing would be required.

Although construction of the transmission lines at locations adjacent to roadways would temporarily affect local traffic, no homes would need to be removed or relocated. There are a few existing houses and ranches located between 550 feet (south) and 900 feet (southwest) of the proposed Central East Substation within the Central Link; however, the substation would avoid these structures and would allow for continued access and use. The proposed Central East Substation would be constructed on land already owned by SDG&E. As no impacts would occur along the Proposed Project at any point, displacement of housing is not discussed on a link-by-link basis.

Would construction workers require housing that exceeds the supply of local housing or temporary housing facilities? As indicated in Section B.4.8 and in Section D.14.2 above, the Proposed Project would employ up to 800 skilled or semi-skilled construction personnel (Table B-43, Construction Labor), with a maximum of 125 personnel working within any one link at any one time. Most of the labor would be required to install structure foundations between October 2008 and December 2010. Remote areas of Imperial and San Diego Counties would potentially lose access to temporary housing due to the influx of construction labor, if housing is required during construction of the proposed transmission line. However, in the Imperial Valley Link, most workers would likely stay in the El Centro area, which has a population of 37,835 persons (U.S. Census, 2000), and workers in San Diego County would likely stay closer to the more heavily populated areas nearer to the coast, or in Ramona or Borrego Springs.

Even assuming that all of the project workers would require housing, they would only occupy 0.16 percent of the combined vacant housing (not including hotels) in Imperial and San Diego Counties (see Table D.14-1). The required labor would be drawn primarily from the local population. Consequently, few, if any, workers are expected to relocate permanently during project construction. As such, demand to local housing would not exceed the supply of local housing or temporary housing facilities. As no impacts would occur along the Proposed Project route, demand for housing is not discussed on a link-by-link basis.

Would labor force requirements create a substantial demand for labor or a change in local employment? Construction employment for the Proposed Project would include skilled or semi-skilled positions including line workers, welders, heavy equipment operators, surveyors, engineers, utility equipment workers, truck drivers, warehouse workers, clerical workers, and laborers. As indicated in Table D.14-1, Imperial and San Diego Counties contain a large construction workforce in proportion to the Proposed Project labor force requirements. Workers from either county or other nearby counties would potentially work on any of the links.

The maximum required construction workforce of 800 personnel required for the Proposed Project would comprise 0.64 percent of the total combined construction workforce of Imperial and San Diego Counties (125,129 persons). If SDG&E does not use its own crews, any new personnel for operation and maintenance would be drawn from local populations, which would benefit local employment. Although there are portions of the Proposed Project that have low populations, large local construction workforces are generally available in the region because of larger population centers in San Diego County and the El Centro area in Imperial County. Local highways provide good access to the alignment from throughout the region. It is approximately 115 miles (less than a 2-hour drive) between downtown San Diego and El Centro. Therefore, few, if any, workers are expected to relocate to the area permanently for construction. After construction, only 20 workers would be required for operation of the project. The project would not adversely impact the local labor force. As no impacts would occur along the Proposed Project route at any point, change in local employment and/or labor is not discussed on a link-by-link basis.

D.14.5 Imperial Valley Link Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class II agricultural revenue, Class III for business revenue, Class IV for economic benefits)

Revenue from Business Operations. Business uses occur along the proposed route, but the project would not require the removal or relocation of any business uses. Impacts on local businesses would potentially result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Transportation and Traffic), and D.10 (Public Health and Safety). Where Proposed Project short-term construction impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, the impacts would be short-term construction impacts that would not displace existing businesses and have not been found to result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Revenue from Agricultural Operations. Construction of new 500 kV towers in the agricultural areas of Imperial County would require construction equipment to traverse agricultural land. This would temporarily restrict crop production or damage crops if activities occurred during the growing season. The restriction of crop production or damage to crops would potentially decrease revenues for the agricultural landowners whose crops would be affected by project activities (Class II). Section D.6 discusses the land under active agricultural operation within the Imperial Valley Link that would be impacted by construction activities. This would involve the construction and/or expansion of access roads, the installation of tower structures and wires, and the presence/staging of construction equipment and vehicles. In addition, the Proposed Project would cross directly over Bullfrog Farms (dairy farm). Impacts on dairy operations and associated mitigation (Mitigation Measure AG-3a: Coordinate with Dairy Operators) are discussed in Section D.6.5.1 (Agricultural Resources).

As part of the Proposed Project, APMs and mitigation measures would be implemented to reduce the effects of construction on businesses. Specifically, APMs LU-1, LU-3 through LU-7, and LU-10 include measures to: (1) provide advanced notification to individuals within 300 feet of construction activities; (2) minimize/avoid construction in agricultural areas during certain seasons, and/or compensate farmers for project-related losses of crops or other pertinent agricultural resources; (3) provide alternate access for affected individuals; (4) coordinate construction activities with water management representatives; (5) confine construction activities to predetermined limits of construction; and (6) minimize/avoid interference of construction with the operation of agricultural equipment. Table D.14-7 describes the applicable APMs. With implementation of the APMs, including avoiding placement of facilities (such as new access roads) in active agricultural areas and locating facilities along the edge of active agriculture wherever feasible (when it is not feasible to locate project facilities along such borders, SDG&E will consult with affected property owners/operators to identify facility locations that create the least potential impact to property/operations, and that are mutually acceptable to property owners/operators to the extent feasible. SDG&E will pay just compensation to affected property owners/ operators based on the facility locations identified by SDG&E), direct impacts to farmland would be less than significant (see Section D.6).

Finally, APM LU-3 states that farmers (or other applicable parties) will be compensated for project-related losses of crops or other pertinent agricultural resources based upon a professional appraisal. As discussed in Section D.6, Mitigation Measure AG-1a would also require that SDG&E coordinate with property owners and tenants to ensure that project construction would be conducted so as to avoid interference with agricultural operations and existing equipment and irrigation systems. Because impacts to Active Agricultural Operations would be reduced to less than significant with the implementation of land use and agricultural resources APMs and mitigation measures and farmers would be compensated, any associated impacts to crop and/or dairy revenues would be less than significant. Therefore, no additional mitigation measures are recommended outside of those presented in Section D.6 (Agricultural Resources) to mitigate potential impacts that would result in a substantial change to local agricultural revenues. Please note, the full text of the mitigation measures can be found in Appendix 12.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Mitigation Measures for Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments

AG-1a Avoid interference with agricultural operations.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II on agricultural lands, Class III for overhead construction)

Construction within a new ROW would result in the collocation of new towers and power lines adjacent to and across existing utility lines. As described in Section D.14.2.1, the route would parallel and cross several transmission lines and canals in the Imperial Valley Link. Therefore, there would be potential for service interruptions of these utilities or preclusion of access to canals during construction of the Proposed Project. Issues and measures related to the crossing of IID canals are discussed in Section D.4 (Land Use).

Under Section 1, Chapter 3.1, "Protection of Underground Infrastructure," Article 2 of California Government Code §§4216-4216.9, SDG&E is required to contact a regional notification center at least two days prior to excavation of any subsurface installation. This action would cause Underground Service Alert to notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area. The location of all underground electric, water, gas, cable or telecommunications lines within the vicinity (at least 1,000 feet) of the Proposed Project would be marked.

Construction of tower foundation would not be within any roadways, thereby avoiding any utilities in roads. Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the Proposed Project to ensure that the project design would not conflict with other facilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §§4216-4216.9 and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions. In addition, the Imperial Valley Link would be overhead

and so there would be very little ground disturbance of heavily used underground utility corridors, such as roads. Therefore, potential impacts related to a collocation accident or utility disruption would be less than significant (Class III). No mitigation measure is required.

Agricultural Lands. On off-road agricultural lands, there is the potential to accidentally disrupt underground irrigation pipes and/or drain tile systems during excavation or other ground disturbing construction activities (Class II). Tile lines are generally buried 4.5 to 9 feet below the ground surface. However, Mitigation Measure AG-1a (Avoid interference with agricultural operations) specifies that SDG&E must coordinate with property owners and tenants to ensure that project construction will be conducted so as to avoid interference with agricultural operations. Implementation of Mitigation Measure AG-1a would reduce impacts to Active Agricultural Operations and disruption to existing agricultural irrigation and/or tiling systems to less than significant levels.

Mitigation Measure for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

AG-1a Avoid interference with agricultural operations.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Water. Water would be required during project construction for dust abatement and cleaning construction equipment. The amount of water required depends on the length of access roads used, weather conditions, road surface conditions, and other site-specific conditions. Dust suppression efforts would occur on each day that grading activities take place and when construction vehicles use unpaved access roads. During clearing and grading activities and throughout project construction an average of 27,000 gallons per day of water would be used for dust control and 36 gallons per cubic yard would be used for tower construction (see Table B-5). However, water consumption for this purpose would also vary depending on the implementation of the air quality Mitigation Measure AQ-1a (Implement Fugitive Dust Control Plan) in Section D.11 (Air Quality) that specifies the use of soil binders on unpaved roads, staging areas, and parking areas, which would substantially minimize water use. Water would also be needed to make the concrete used during project construction and is often used to lubricate the auger during boring operations. Comparatively small amounts of potable water would be needed for sanitary and drinking purposes. Estimated total water usage by link is listed in Table B-4a in Section B.

Water use during project construction for both concrete mixing and dust control would be a fraction of the total water supply for the jurisdictions affected by the Proposed Project, such as IID where its East Highland Canal alone supplies approximately 1,647,993,600 gallons/day, and would not change the ability of the water suppliers identified in Section D.14.2.1 to serve the project area demands (IID, 2007). In 2005, IID delivered 2,465,013 acre-foot of water for agriculture and the maximum consumptive use was 3.1 million acre-foot of water (at Imperial Dam) (IID, 2005). Water required for the project (for either dust control and/or for batch plants for concrete mixing at Ocotillo Wells) would not change the ability of IID to serve project area demands, and for a contract to occur IID would need to determine that the Proposed Project would not affect its ability to serve customer demands. Therefore, the water demand for construction of the Proposed Project would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the individual links, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. As identified in Table D.14-2, Imperial County contracts with Waste Management Incorporated (WMI) for trash and recyclables collection. WMI operates 11 landfills in unincorporated areas of the county, where a total of 67,882 tons of waste are landfilled each year.

The closest landfills throughout the Imperial Valley Link would be the:

- Allied Imperial Landfill (104 East Robinson Road) that allows a maximum permitted throughput of 1,135 tons/day and has a remaining capacity of 2,105,500 cubic yards;
- Imperial Solid Waste Site (1705 West Worthington Road) that allows a maximum permitted throughput of 207 tons/day and has a remaining capacity of 183,871 cubic yards;
- Salton City Solid Waste Site (3 miles west of Highway SR86 and 3 miles south of Salton City) that allows a maximum permitted throughput of 50 tons/day and has a remaining capacity of 9,078 cubic yards;
- Calexico Solid Waste Site (New River and Highway 98) that allows a maximum permitted throughput of 150 tons/day and has a remaining capacity of 1,530,950 cubic yards;
- Holtville Solid Waste Site (2678 Whitlock Road) that allows a maximum permitted throughput of 20 tons/day and has a remaining capacity of 17,006 cubic yards; and
- Borrego Landfill (2449 Palm Canyon Road) that allows a maximum permitted throughput of 50 tons/day of waste and has a remaining capacity of 459,856 cubic yards (CIWMB, 2007).

Estimated solid waste generation for excavation and other construction activities is listed in Section B.4.98 (Removal of Facilities and Waste Disposal). Proposed Project Construction would generate waste largely in the form of soil from tower foundation excavations. Approximately 80 percent of the excavated material would be clean and dry and would be "spread" along the ROW. Section D.10 (Public Health and Safety) discusses impacts in the event contaminated soil is encountered. No existing structures would be removed in the Imperial Valley Link. As the waste generated by the Proposed Project would occur over a 30-month period and be dispersed among the various landfills, the daily waste exported off site would be a fraction of the maximum daily throughput for any of the landfills identified in Table D.14-2 and listed above and the landfills have adequate remaining capacity. Due to the number and total capacity of landfills serving the Imperial Valley area, capacity for materials generated from construction of the Proposed Project would be available. Therefore, construction waste generated by the Proposed Project would not significantly affect the remaining capacities of local landfills to serve local demands (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation within the Imperial Valley Link to ensure that maximum recycling activities would occur.

Public Services. Construction Workers Demands. As indicated in Section B, Project Description, Table B-42 (Project Labor Force Requirements), the workforce necessary for construction of the Proposed Project is anticipated to be a maximum of 125 personnel per link with a maximum of 800 workers overall. These workers likely live in the San Diego or El Centro areas and may already work for SDG&E. Construction of the Proposed Project would not result in a direct increase in the local population, leading to long-term demands to local public services (see also Section H.2, Growth-Inducing Effects, for a complete discussion of population impacts). Nor would the Proposed Project result in any long-term requirements that would place a permanent increased demand on emergency service providers that would result in the need for new or expanded facilities. Because of the large available labor pool in San Diego and Imperial Counties and nearby areas, few construction workers are expected to

temporarily or permanently relocate to the area. Therefore, construction workers would not generate additional population that would exceed the capacity of local public service providers listed in Table D.14-2. Therefore, the temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection or police protection and impacts, because it would not require construction or expansion of facilities or services. Impacts would be less than significant (Class III).

Fire Hazards. As described in Section D.15 (Fire and Fuels Management), construction activities would result in an increase in potential fire hazards and would increase the need for emergency services and first responders due to accidents caused by construction personnel or equipment. The presence of construction equipment (vehicles, generators, tools, etc.) and personnel may increase the likelihood of a wildland fire. Overgrown and untended vegetation may be present in or near the construction areas and could be ignited by a spark or heat-related incident due to the operation of construction equipment or construction activities. In addition, the presence of construction personnel increases the potential for wildland fires through the increase of human influenced ignition (smoking, use of flammables, etc.). This increase in potential fire hazards resulting from construction, though less than significant, would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management) and not within this section.

Emergency Services. Construction of the project and equipment would impede emergency access through the area. With implementation of APM PSU-APM-3, SDG&E would be required to coordinate construction schedules, lane closures, and other activities associated with installation of the Proposed Project with emergency and police services to ensure minimal disruption to response times and access for these services. Impacts to emergency access are discussed under Section D.9 (Transportation and Traffic), which concludes that such impacts would be less than significant. Therefore, impacts to emergency access and/or public services and facilities would be less than significant (Class III) and no mitigation measure is required.

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

- S-3a Recycle construction waste. To comply with the Integrated Waste Management Act of 1989, during project construction SDG&E and/or its construction contractor shall recycle a minimum of 50 percent of the waste generated during construction activities. In unincorporated San Diego County, to comply with the construction and demolition debris ordinance, SDG&E and/or its construction contractor shall recycle a minimum of 90 percent of inerts and 70 percent of all other materials, and submit all applicable plans and documentation. Following the completion of construction activities, SDG&E shall provide the CPUC and BLM with documentation from the recycling and landfill facilities used to show that the amount of waste recycled was 50 percent or more in Imperial Valley and incorporated San Diego County, and 90 percent of inerts and 70 percent of all other materials in unincorporated San Diego County.
- **S-3b Use reclaimed water.** To the extent feasible, SDG&E shall coordinate with local water districts in advance in order to efficiently obtain reclaimed or potable water for delivery to the construction sites and to meet any restrictions imposed by them. The Applicant shall provide a letter describing the availability of reclaimed water and efforts made to obtain it for use during construction to the CPUC and BLM a minimum of 60 days prior to the start of construction.

Operational Impacts

Increased demands on emergency services would occur if operation of the Proposed Project would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in greater detail in Section D.15 (Fire and Fuels Management) and is not addressed in this section.

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class II)

As discussed in Section D.6 (Agricultural Resources), the Proposed Project would traverse land occupied by the Bullfrog Farms Dairy between MP 14 and 15 on the north side of West Payne Road. Bullfrog Farms Dairy houses 3,200 dairy cows at its dairy facility and the line would pass across the property and almost directly over the milking facility. Therefore, dairy operations would also be potentially disrupted by presence of the transmission line, which would potentially result in loss of revenue. Maintenance activities would also potentially disrupt dairy operations. Implementation of Mitigation Measure AG-3a, as described in Section D.6 would ensure that impacts to dairy operations would not be significant and therefore, associated impacts to revenues would also be less than significant (Class II) and no additional mitigation is required.

Mitigation Measure for Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments

AG-3a Coordinate with dairy operators.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be trucked from the existing IID power plant in El Centro to the individual structures; however, compared to water usage during project construction and the overall volume of IID water supply discussed above, water for washing would be minor and impacts on existing resources and suppliers would be less than significant (Class III).

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates levied within the affected jurisdictions. SDG&E's property taxes would increase as a result of the Proposed Project. The State of California Board of Equalization (BOE) assesses infrastructure facilities annually. Dispersion of property tax revenue is determined based upon the location of the taxable property. Any increase in property tax revenue as a result of the Proposed Project would be a beneficial impact to the local economy.

The BLM would receive no tax revenue from the installation of the Proposed Project on BLM lands, because local tax revenues do not accrue on federal or State lands. However, BLM does collect fees annually for ROW Grants. For 2007 (rates are adjusted annually) BLM would receive \$14.60 per acre for a ROW in Imperial County and \$43.81 per acre for a ROW in San Diego County (BLM, 2007). The money would go into the federal general fund and would not directly benefit the BLM El Centro office.

The Proposed Project would not result in an adverse change in public resource revenue. Furthermore, the Proposed Project would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Proposed Project are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are required.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the Proposed Project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission lines on property values. Also during other recent transmission line projects, the CPUC has noted a high level of public concern associated with the siting of these lines and potential effects on property values. The California Energy Commission (CEC), in its review and licensing of several power plant projects between 2000 and 2003, received similar public input regarding concerns over power plant siting and property values. As a result, CEC Staff researched the literature on proximity impacts analysis for property values. The CEC cited "A Primer on Proximity Impact Research: Residential Property Values Near High-Voltage Transmission Lines" (Kinnard and Dickey, 1995), as a comprehensive study on this topic.

The CPUC used this literature-review approach in addressing concerns regarding property values in four recent transmission line EIRs. Claims of diminished property value through decreased marketability are based on the reported concern about hazards to human health and safety; and increased noise, traffic, and visual impacts associated with living in proximity to unwanted land uses such as power plants, freeways, high voltage transmission lines, landfills, and hazardous waste sites.

Studies cited in the Kinnard and Dickey paper show that three procedures are useful in measuring the differences in terms of sales prices, marketing periods, and/or sales volume of nearby properties between properties in proximity to transmission or distribution lines and competitive properties that are not. The three procedures cited in the Kinnard and Dickey paper are: Paired Sales Analysis; Survey Research/Opinion; and Market Impact Studies Using Multiple Regression Analysis (MRA) in the Hedonic Pricing Model Format. The paper concludes that the MRA approach is preferred in the current professional and academic literature, because it reflects what buyers and sellers actually do as opposed to what potential buyers say they might do under specified hypothetical circumstances. Further, the use of large sets of sales data indicates that the results are more representative of the market than those of the paired sales studies.

Under the general rubric of diminution in the market value of residential properties, three possible effects have been claimed, singly or in combination, in the Kinnard and Dickey paper:

Paired Sales Analysis involves finding sales of properties within the impact area and comparing them with sales of similar, competitive properties in the control area. Any price differentials are noted, and any pattern of such differences is identified and statistical testing procedures are applied to the results. There are two possible short-comings of this market procedure. First, identifying what constitutes a pair of virtually identical properties is often a matter of subjective judgment on the part of the analyst-appraiser. Different analysts studying the same market frequently produce different pairs. Secondly, the relative paucity of appropriate pairs can render the entire procedure (and its results) questionable in terms of its representing the market.

Survey Research/Opinion method is used as either a supplement or substitute for analysis of market sales transaction data, because it reflects responses to hypothetical situations by interviewees who are not necessarily prospective buyers. Potential purchasers either will or will not buy; they either will or will not pay the same or similar prices for proximate properties.

MRA in the Hedonic Pricing Model Format involves gathering data on many market sales transactions within the impact area and within one or more similar control areas over a specified period (usually a few years prior to public knowledge of the Project). The extended time period is used to identify and measure any price/value impact that occur within the impact area after an awareness of the project occurs. This type of "before and after" analysis supplements the comparison of levels and trends and prices, marketing time, and sales volume within the impact and control area. The post-announcement sales information also provides a basis for testing the likely duration of any value impact that might be identified.

- **Diminished Price**, which is identified by comparing prices of units that are proximate to power lines with prices of similar and competitive properties more distant from power lines.
- Increased Marketing Time Even when proximate properties sell at or near the same prices as more distant properties, claimants argue that proximate properties take longer to sell. Such increased marketing time can represent a loss to the seller by deferring receipt, availability, and use of sale proceeds.
- Decreased Sales Volume A more subtle indicator of diminished property value if potential buyers
 decide not to buy in the impact area. A measurable decrease in sales volume in the impact area compared with sales volume in the control area where otherwise similar properties purportedly still are
 selling can represent evidence of decreased market value from proximity to the high voltage transmission lines (or claimed hazard).

A 2003 Electric Power Research Institute (EPRI) study, "Transmission Lines and Property Values: State of the Science," stated that differences in location and time of data collection, as well as research design, make direct comparisons of results from the various studies very difficult. Although quantitative generalizations from studies cannot be reliably made, the following conclusions from studies seem to be similar across the board (EPRI, 2003):

- There is evidence that transmission lines have the potential to decrease nearby property values, but this decrease is usually small.
- Lots adjacent to the ROW often benefit; lots next to adjacent lots often have value reduction.
- Higher-end properties are more likely to experience a reduction in selling price than lower-end properties.
- The degree of opposition to an upgrade project may affect size and duration of the sales-price effects.
- Setback distance, ROW landscaping, shielding of visual and aural effects, and integration of the ROW into the neighborhood can significantly reduce or eliminate the impact of transmission structures on sales prices.
- Although appreciation of property does not appear to be affected, proximity to a transmission line can sometimes result in increased selling times for adjacent properties.
- Sales-price effects are more complex than they have been portrayed in many studies. Even grouping adjacent properties may obscure results.
- Effects of a transmission line on sales prices of properties diminish over time and all but disappear in five years.
- Opinion surveys of property values and transmission lines may not necessarily overstate negative attitudes, but they understate or ignore positive attitudes.
- The release of findings from the Swedish study on EMF and health effects had no measurable influence on sales prices.

The EPRI (2003) study points out that one of the difficulties in determining the impact on property values is the wide range of methodologies used to measure impacts. It is difficult, if not impossible, to predict the likely impacts on property values of the Proposed Project, let alone differences between alternative routes and/or with tower removal/consolidation. A Pacific Consulting Services (1991) study of the area around Vallejo, CA that is entitled "A Statistical Analysis of Transmission Line Impacts on Residential Property Values in Six Neighborhoods" found that overall the presence of a transmission

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line within a neighborhood has less than a 1 percent effect on the sales prices of most properties in the neighborhood. Under some conditions, however, there can be as much as a 12 percent adverse effect or a 10 percent positive effect on selling price.

The six selected neighborhoods with lines reflected a variety of transmission line and ROW conditions. Two of the neighborhoods were crossed by 115 kV lines. One neighborhood was crossed by a 230 kV line. Three of the neighborhoods were crossed by a ROW that originally contained a 115 kV line and at the time of the study contained both the 115 kV and 230 kV lines. Two additional areas were considered comparison areas and were not crossed by transmission lines. In addition, some of the neighborhoods were located on hilly terrain, affording more pronounced views of nearby lines and towers, while other neighborhoods were flat. Access to the ROWs varied from locked gates to integrated walkways, and maintenance quality/landscaping also varied.

Factors linked with adverse price impacts include: ROW passage through adjacent property and modification to (upgrading) the line after development of the neighborhood. Factors linked with favorable price impacts are integration of the ROW design into the neighborhood with unobstructed access and planned landscaping of the ROW. Visibility of lines outside of the neighborhood appear to have no effect on selling prices in the neighborhood (Pacific Consulting Services, 1991).

Like the aforementioned studies, the Pacific Consulting Services study also found that adverse impacts associated with line upgrading diminish over time, all but disappearing within five years of reconstruction. It may be that both the size of these effects and the amount of time until they dissipate depend on the level of community opposition to construction and how the utility handles the opposition.

In addition to a literature search on proximity analysis impacts, the CEC staff reviewed the Analysis of Property Value Impacts of the Crockett Cogeneration Project, submitted by the Applicant for the Crockett Cogeneration Project. The Crockett analysis cites several studies that examine the impacts on property values of very large industrial facilities.⁵ Such facilities include nuclear power plants, industrial waste incinerators, and landfills. The findings of previous studies in the Crockett analysis:

...yield an equivocal conclusion. Under some conditions facilities result in negative economic impacts and under other conditions they do not. Thus, even for very large facilities that are extreme in terms of their potential health, safety, and aesthetic impacts, there is no clear association with diminished economic impacts. Indeed, economic impacts are not clearly and reliably observed even for nuclear power generation facilities near residential properties (Analysis of Property Value Impacts of the Crockett Cogeneration Project, Appendix X, Crockett Cogeneration Project, 1992).

Further, the Crockett analysis states that:

...there are many factors involved in purchasing a new home: affordability; age; size; schools; location; and so on, and it has simply not been demonstrated that a view obstruction would be a major factor in a property value decline (Analysis of Property Value Impacts of the Crockett Cogeneration Project, Appendix X, Crockett Cogeneration Project, 1992).

As stated in the Crockett analysis, one or more of the following three methods were used to study impacts on property values: hedonic pricing; contingent valuation; and regression analysis of market sales data. Hedonic pricing techniques analyze how the attributes of a good affect its price, and have been used in several of the studies to estimate the losses in sale price of homes due to possible exposure to technological or natural risks.

The Kinnard and Dickey paper and the Crockett analysis cite several examples of proximity impact analyses, methodologies used to measure impacts, and types of possible proximity impacts on residential property values. Both studies conclude that differing, sometimes conflicting, findings have emerged from market studies. While it is possible that property owners near the Proposed Project may believe that their homes will diminish in value because of project implementation, the actual loss of property value and potential effects can only be tested through data from home sales. The MRA method, as supported by the Kinnard and Dickey paper, requires that data be collected on as many market sales transactions as possible within the impact area and within one or more similar control areas over a few years prior to an awareness of a project to accurately reflect what buyers and sellers actually do as opposed to what potential buyers say they might do under specified hypothetical circumstances.

The studies cited in this section and multiple regression analyses have shown that there is evidence that transmission lines have affected property values in some cases, though the effects are generally smaller than anticipated and difficult to quantify. In one study, about half of the estimated reduction in value was due to non-EMF effects (e.g., visual impacts), and the other half due to health and safety concerns such as EMF for homes within 100 meters of the line (von Winterfeldt, et al., 2004). These issues and potential impacts are analyzed in Section D.3 (Visual Resources) and Section D.10 (Public Health & Safety). Although the aforementioned discussion applies to new corridors, as noted in Section D.14.2, portions of the Proposed Project would be constructed within and adjacent to existing corridors where other transmission lines already exist. Incremental effects on property values that may result from the changes within the corridor resulting from this project would be even smaller.

There are scattered occurrences of single-family homes between MP 4 and MP 20 in the Imperial Valley and around the Ocotillo Wells area that are about 300 feet from the route and agricultural lands through which the ROW would cross. This portion of the project is largely agricultural and bordered by Department of Defense land, open desert, and agricultural land. Equipment related to military operations, irrigation canals, and farming operations is used in the area and introduce other industrial features into the viewshed.

As discussed above, impacts on property values result from visual impacts, or health and safety concerns such as EMF. These issues and potential impacts are analyzed extensively in Section D.3 (Visual Resources) and Section D.10 (Public Health & Safety). Implementation of mitigation measures in the Visual Resources section, such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would reduce the visual impacts of the project. Impacts on revenues on farming land is discussed under Impact S-1 (Project construction would cause a substantial change in revenue for businesses) above and was found to be less than significant (Class III), except for at Bullfrog Farms where the impact would be less than significant with mitigation (Class II).

As discussed in Section D.10.11.3, there remains a lack of consensus in the scientific community in regard to public health impacts due to EMF at the levels expected from electric power facilities. Further, there are no federal or State standards limiting human exposure to EMFs from transmission lines or substation facilities in California. For those reasons, EMF is not considered in this EIR/EIS as a CEQA/NEPA issue and no impact significance is presented in this EIR/EIS. However, the CPUC has implemented, and recently re-confirmed, a decision requiring utilities to incorporate "low-cost" or "no-cost" measures for managing EMF from power lines. These measures for mitigation of magnetic fields would be incorporated into the Proposed Project and may help to reduce perceived health effects of transmission lines that would adversely affect property values.

The significance criteria listed in Section D.14.4.1 state that the impact would be significant if the project would "cause a substantial decrease in property values." Where Proposed Project impacts in other issue areas that can contribute to reduction in property values are less than significant or have been mitigated to less than significant levels, then they would not cause considerable property value changes. Therefore, any associated property value impacts would also be less than significant and no mitigation measure is recommended (Class III). It is concluded, then, that the project would not generate effects that would significantly impact property values in these circumstances.

Moreover, even in areas where there would be potentially significant impacts in other issue areas (e.g., visual resources) coupled with other line and/or property characteristics described in the studies that would contribute to property values impacts, the numerous studies discussed above conclude that these effects are usually smaller than anticipated and essentially impossible to generally quantify due to the individuality of properties/neighborhoods, differences in personal preferences of individual buyers/sellers, and the weight of other factors that contribute to a person's decision to purchase a property. Other factors (e.g., neighborhood factors, square footage, size of lot, irrigation potential) are much more likely than overhead transmission lines to be major determinants of the sales price of property (Kroll and Priestley, 1992). In addition, across the board, studies have generally concluded that over time, any adverse property value impacts diminish and within five years the change is negligible most likely due to increased screening as trees and shrubbery grow and/or diminished sensitivity to the line proximity in the absence of adverse publicity. As a result, any changes in property values would not be a substantial decrease and this impact is considered to be less than significant (Class III).

CEQA Guidelines §15131(a) states that economic or social effects of a project shall not be treated as significant effects on the environment, and these effects only need to be considered in a chain of cause and effect if they would result in a physical change to the environment that was caused in turn by the economic or social changes. As concluded above, any decrease in property values would be less than significant, and likewise, there would be no or less than significant resulting physical changes in the environment.

It should be noted that landowners of any private parcels that would be crossed by the Proposed Project would be compensated by SDG&E for use of its easement across the property based on the fair market value of the property taken. Due to the public nature of the BLM lands traversed by the Proposed Project, property value impacts would not apply to BLM lands. Income generated from BLM ROW grants is discussed under Impact S-4 (Property tax revenues and/or fees from project presence would substantially benefit public agencies) above.

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[&]quot;Fair market value" is a term in both law and accounting to describe an appraisal based on an estimate of what a buyer would pay a seller for any piece of property. It is a common way of evaluating the value of property when assessing damages to be awarded for the loss of or damage to the property, generally in a claim under tort or a contract of insurance.defined by California Code of Civil Procedure section 1263.320(a) as "...the highest price on the date of valuation that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for so doing, nor obliged to sell, and a buyer, being ready, willing, and able to buy but under no particular necessity for so doing, each dealing with the other with full knowledge of all the uses and purposes for which the property is reasonably adaptable and available." In addition, where the property acquired is a part of a larger parcel, the payment of severance damages may be required if the remaining property (remainder), after the portion acquired, has been diminished in market value when compared with the same remainder before the taking.

Modifications to Imperial Valley Substation

The existing Imperial Valley Substation is located southwest of El Centro and is surrounded by open space. Modification and expansion of the Imperial Valley Substation would occur within the existing substation footprint. As a result of the remote location and location within an existing SDG&E-owned facility, a number of potential impacts would be avoided at the substation. These are: Impacts S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments), S-4 (Property tax revenues and/or fees from project presence would substantially benefit public agencies), and S-5 (Presence of the project would decrease property values).

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

Because project work would occur within the existing Imperial Valley Substation, there would be potential for service interruptions or utility facility damage in the event of an accident during construction. However, the Imperial Valley Substation is owned and operated by SDG&E and thus crews are familiar with the facility. Work is routinely performed within the substation and in the event that any accidental damage was to occur, operational employees are trained to respond and minimize/avoid any potential service interruptions by transferring load. Electrical systems are designed with redundant means to provide service. Therefore, because back-up means of preventing service interruptions in the event of an accident are in place at the substation, impacts to existing utilities would be less than significant (Class III) and no mitigation measure is required.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Construction at the substation would require two months of below grade construction and two months of above grade construction. Although removal and disposal of existing facilities would not be required, some solid waste would be generated during construction activities. This short-term work would also include water usage for dust suppression. The waste generated and water usage would be minor and short-term compared to other aspects of the Proposed Project and would be accommodated by existing water supply and landfill capacity in the area. Impacts would be less than significant (Class III) and no mitigation measure is required.

D.14.6 Anza-Borrego Link Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class I for business revenue, Class IV for economic benefits)

Revenue from Business Operations. This link is located within Anza Borrego Desert State Park. The overhead line would be built along an expanded existing ROW (expanded from 100 feet to 150 feet) on

undeveloped Park land and would not require the removal or relocation of any business uses. The existing 69 kV and 92 kV transmission lines would be installed underground in one trench in SR78 for approximately 6.6 miles through ABDSP.

Project construction activities would create a number of temporary conditions that may dissuade recreationists from visiting the Park. For example, noise, dust, and traffic (and associated vehicle emissions) generated during construction negatively affect a visitor's enjoyment of the recreation area. The location of construction equipment may temporarily preclude access to recreation areas, especially in the vicinity of SR78. Construction-period disturbances to recreational activities may temporarily reduce access and visitation to portions of ABDSP, resulting in potentially significant impacts to businesses related to the tourism industry within ABDSP.

In addition, negative impacts on the Park tourism industry would potentially result in lost revenue to Anza-Borrego Desert State Park itself due to the collection of fewer day use parking fees and camping fees at Tamarisk Grove Campground (open October through May), located at the intersection of SR78 and S3 and adjacent to the project route. Tamarisk Grove Campground has 27 sites and charges \$20/night during peak season and \$15/night during off-peak season. During the past two years, Tamarisk Grove Campground brought in an average of \$324 in day use fees and \$22,190 in camping fees. The project would also likely reduce primitive overnight camping in the Yaqui Well area; however, no fees are required to camp in the Yaqui Well area.

Revenues vary from year to year based upon the wildflower bloom. A good wildflower year can double the number of park visitors. Year 2004/2005 was a very good wildflower year, 2005/2006 was not as good of a flower year, and 2006/2007 was a terrible flower year. Table D.14-9 shows three years of data that includes all of Anza-Borrego Desert State Park.

All of the revenue goes into the State's General Fund, and therefore, any change in money generated at the Park would be only a fraction of the total State budget and it would not impact the Park's distribution for the following year.

Table D.14-9. Annual Revenues by Season for ABDSP						
Revenue Source Year 2004/2005 Year 2005/2006 Year 2006						
Day Use	\$65,240	\$47,633	\$41,998			
Passes	\$4,160	\$3,081	\$2,192			
Camping	\$316,898	\$338,876	\$360,702			
Showers	\$5,365	\$5,815	\$6,607			
Special Events	\$7,850	\$6,985	\$4,292			
Miscellaneous	\$3,003	\$2,926	\$3,864			
TOTAL	\$402,516	\$405,316	\$419,655			

Source: ABDSP, 2007a.

However, revenues from the Anza-Borrego Foundation and Institute (ABFI) also support the Park. The ABFI is in charge of the sales of books and merchandise at the ABDSP Visitor Center, and those funds return to the Park in the form of grants. Average income from merchandise sales by ABFI at the ABDSP Visitor Center is \$250,000, with considerably more coming in during a good wildflower season. ABFI also brings in approximately \$55,000/year from the various educational programs they put on for the general public (ABDSP, 2007a). These programs have only been offered for the past three years, and participation, and hence income, has gone up every year. This money does not go the State General Fund, but is funneled back into Anza-Borrego Desert State Park support. Eighty-nine (89) percent of the money raised

goes to Program Services and the remaining money goes to Administration (6 percent) and Fundraising (5 percent) (ABFI, 2007). During the 2006 fiscal year, the ABFI acquired over 400 acres for addition to ABDSP and continued to expand education, research and interpretation, and online distance learning programs (GuideStar, 2007). In 2007, ABFI is hoping to launch a \$1.4 million project to acquire inholdings in the wilderness areas of the northwest section of the Park.

If construction of the proposed route were to cause a change in revenue to the ABFI Visitors' Center, the purchase of future inholdings and other ABFI-funded programs would be affected. Although Park revenues would not affect the Park's distribution for the following year, recreational impacts from project construction would result in a potentially significant impacts to businesses related to the tourism industry and at the ABFI Visitors' Center. These issues and potential impacts that would reduce visits are analyzed extensively in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.5 (Wilderness and Recreation), D.8 (Noise), and D.9 (Transportation and Traffic). Implementation of Mitigation Measures WR-1a (Coordinate construction schedule and activities with the authorized officer for the recreation area), WR-1b (Provide temporary detours for trail users), WR-1c (Coordinate with local agencies to identify alternative recreation areas) in Section D.5 (Wilderness and Recreation) would minimize construction-related impacts to ABDSP.

In addition, if Tamarisk Grove Campground or other established recreation facility are closed by CDPR due to public safety concerns or a significant reduction of recreational value resulting from construction of the project, then implementation of Mitigation Measure WR-3b (Provide funding for planning and physically establishing replacement campsites and facilities) would require SDG&E to provide funding for planning and establishing replacement facilities. Project-required mitigation to reduce impacts that affect the recreational experience would also be expected to reduce impacts on the related tourism industry. Implementation of mitigation measures, such as those that would coordinate construction schedule detours, would also reduce associated local business revenue impacts. Nonetheless, a complete overlap of the Proposed Project Construction schedule and tourist season for ABDSP would cause a reduction in visitation and access to recreation and wilderness areas, resulting in a significant and unmitigable impact to Wilderness and Recreation (see Impact WR-1 in Section D.5). Likewise, even with the inclusion of mitigation, this impact would result in significant and unmitigable impacts to businesses related to the tourism industry and at the ABFI Visitors' Center (Class I). The full text of the mitigation measures can be found in Appendix 12.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Although the Park itself would not realize these economic benefits, businesses and the local economy outside of ABDSP would benefit from employment of construction personnel. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties to areas within the geographic scope of the project. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy, especially to areas such as Borrego Springs (Class IV).

Mitigation Measure for Impact S-1: Project construction and/or transmission line presence would cause a substantial change in revenue for businesses

- WR-1a Coordinate construction schedule and activities with the authorized officer for the recreation area.
- WR-1b Provide temporary detours for trail users.

- WR-1c Coordinate with local agencies to identify alternative recreation areas.
- WR-3b Provide funding for planning and physically establishing replacement campsites and facilities.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Construction of the Anza-Borrego Link of the Proposed Project has the potential to disrupt existing collocated utility lines. The existing overhead 69 kV and 92 kV transmission lines would be relocated as part of the Proposed Project. After probing within the street or street shoulder, a route for the alignment within the easement would be defined that does not affect existing utilities. Although there is adequate space in the roadway, because underground line construction involves more construction in close proximity to existing utilities on a mile-per-mile basis than overhead construction, the chances of underground line construction activities causing an accidental utility service interruption are greater than for overhead construction. Trenching in the public ROW could accidentally damage one or more existing utilities along the proposed underground route.

Therefore, there would be potential for service interruptions of these utilities or other underground utilities in SR78 during construction of the Proposed Project. Installation of new towers and circuits underground would occur with the existing system in service. The cutover would involve a switching maneuver that would interrupt service momentarily. Electrical systems are designed with redundant means to provide service. If it is necessary to take a particular circuit out of service, SDG&E would first ensure that a redundant feed in its overall transmission system is available as not to interrupt service.

Some service disruptions during construction would be unavoidable at a few locations along the proposed ROW. These disruptions would occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. As described above, intentional service interruption during construction would be unavoidable and without notification of the public would significantly hinder activities in the surrounding areas. These impacts are considered potentially significant, but would be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

Where the electrical transmission duct bank would cross or run parallel to other substructures that operate at normal soil temperature (gas lines, telephone lines, water mains, storm drains, sewer lines), a minimal radial clearance of 12 and 24 inches would be required, respectively. Ideal clearances would be 2 to 5 feet. Where duct banks cross or run parallel to substructures that operate at temperatures significantly exceeding normal soil temperature (other underground transmission circuits, primary distribution cables, steam lines, heated oil lines), additional radial clearance may be required. Preliminary engineering investigations have not identified any underground utilities that operate at high temperatures. Clearances and depths would meet requirements set forth with Rule 33.4 of CPUC GO-128.

Under Section 1, Chapter 3.1, "Protection of Underground Infrastructure," Article 2 of California Government Code §§4216-4216.9, SDG&E is required to contact a regional notification center at least two days prior to excavation of any subsurface installation. This action would cause Underground Service Alert to notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area. The location of all underground electric, water, gas, cable or telecommunications lines within the vicinity of the Proposed Project would be marked.

In addition, under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the Proposed Project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with the California Government Code §§4216-4216.9, CPUC GO-128, and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions; however, accidental disruptions could still occur. This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities).

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

- **S-2a Notify public of utility service interruption.** Prior to construction in which a utility service interruption is known to be unavoidable, SDG&E shall notify members of the public affected by the planned outage by mail of the impending interruption, and shall post flyers informing the public of the service interruption in neighborhoods affected by the planned outage. Copies of notices and dates of public notification shall be provided to the CPUC and BLM.
- **S-2b Protect underground utilities.** Prior to construction of the underground transmission line, SDG&E shall submit to the CPUC and BLM written documentation, including evidence of review by the appropriate jurisdictions, including the following:
 - Construction plans designed to protect existing utilities and showing the dimensions and location of the finalized alignment
 - Records that the Applicant provided the plans to affected jurisdiction for review, revision and final approval
 - Evidence that the project meets all necessary local requirements
 - Evidence of compliance with design standards
 - Copies of any necessary permits, agreements, or conditions of approval
 - Records of any discretionary decisions made by the appropriate agencies.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Water. Water would be required during project construction for dust abatement and cleaning construction equipment. The amount of water required depends on the length of access roads used, weather conditions, road surface conditions, and other site-specific conditions. Dust suppression efforts would occur on each day that grading activities take place and when construction vehicles use unpaved access roads. Water consumption for this purpose would also vary depending on use of soil binders on unpaved roads, staging areas, and parking areas, which would substantially minimize water use. Water would also be needed to make the concrete used during project construction and is often used to lubricate the auger during boring operations. Comparatively small amounts of potable water would be needed for sanitary and drinking purposes. Estimated total water usage by link is listed in Table B-4a in Section B.

ABDSP receives its water via groundwater wells throughout the Park. Groundwater depletion, especially due to water use for agriculture and golf courses, is a serious issue in the Borrego Valley and surrounding desert area. Water consumption for project construction activities within ABDSP is listed in Section B.4.1.1 (Overhead Construction). During clearing and grading activities and throughout project construction an average of 27,000 gallons per day of water would be used for dust control and 36 gallon/

yard³ for structure construction. Use of soil binders, which are specified with the implementation of the air quality Mitigation Measure AQ-1a (Implement Fugitive Dust Control Plan) in Section D.11 (Air Quality) would substantially minimize water use.

Depletion of local water supplies and wells as a result of project construction is discussed under Impact H-4 (Groundwater dewatering for project construction could deplete local water supplies) in Section D.12. WQ-APM-6 includes a provision that "SDG&E will negotiate with affected landowners to provide alternative water supplies in the event a supply well or springs dry up directly caused by project activities." However, as discussed in Section D.14.2.2, water would be trucked into the Anza-Borrego Link and would have no impact on wells or groundwater depletion in the Borrego Springs or project area.

Water use during project construction would be a comparatively small amount of the total water supply for the jurisdictions affected by the Proposed Project (see Section D.14.2) and would not change the ability of the identified water suppliers (IID and/or VID) to serve the project area and/or newly constructed batch plant demands (IID, 2007, and VID, 2007a). Adequate water supply is available, and for this contract to occur IID and/or VID would likely determine that it would not effect its ability to serve customer demands. Therefore, the water demand for construction of the Proposed Project would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the individual links, Mitigation Measure S-3b (Use reclaimed water) would be recommended in the Anza Borrego Link for implementation to reduce water usage for construction.

Solid Waste. Proposed Project Construction would generate waste largely in the form of soil, concrete from existing foundations, utility line cable, and scrap metal/wood from the replacement of existing poles. All evacuated material would be removed from the site. Section D.10 (Public Health and Safety) discusses impacts in the event contaminated soil is encountered. The Proposed Project in the Anza-Borrego Link would include the removal of five wood H-frame and 276 wood poles from the existing 69 kV and 92 kV transmission lines. As described in Section B.4.98(Removal of Facilities and Waste Disposal), the conductor would be coiled and hauled off-site to a recycling facility as listed by the Department of Conservation on its Recycler Database (SWRCY). Existing wood poles would be cut at ground level, leaving the embedded portion in place. The wood poles, insulators, cross arms and all other associated hardware would be disposed of at an approved off-site location. There would also be waste generated from roadway material during trenching for underground construction in SR78. Approximately 432 tons of solid waste is expected from wood pole, conductor, and other hardware removal in ABDSP.

Estimated solid waste generation for excavation and other construction activities is listed in Section B.4.98 (Removal of Facilities and Waste Disposal). As identified in Table D.14-2 and described above, the project route is served by a variety of waste management agencies and landfills. The closest landfills would be the Borrego Landfill (2449 Palm Canyon Road) that allows a maximum of 50 tons/day of waste and has a remaining capacity of 459,856 cubic yards; the Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic yards; and the Salton City Solid Waste Site (3 miles west of SR86 and 3 miles south of Salton City) that allows a maximum permitted throughput of 50 tons/day and has a remaining capacity of 9,078 cubic yards (CIWMB, 2007). All three accept construction/demolition and mixed municipal waste and the Borrego and Ramona Landfills also accept agricultural, sludge (biosolids), tires, and wood waste. Because the wood poles are treated, they may need to be disposed of at a facility that accepts treated wood, such as the

Sycamore Sanitary Landfill (8514 Mast Boulevard), which allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards (CIWMB, 2007). Due to the number and capacity of landfills serving the project area, capacity for materials generated from construction of the Proposed Project would be available. Because the exact amount of material recycling is unknown, the total amount of waste requiring landfill disposal is unknown. Recycling activities would greatly reduce the quantity of construction-related materials transported to local landfills.

As the waste generated by the Proposed Project would occur over a 30-month period and be dispersed among the various landfills serving the entire project route, the daily waste exported off site would be a fraction of the maximum daily throughput for any of the landfills identified in Table D.14-2 and discussed above and the landfills have adequate remaining capacity. Therefore, construction waste generated by the Proposed Project in the Anza-Borrego Link would not substantially affect the remaining capacities of local landfills to serve local demands. Although impacts to solid waste facilities would not be significant (Class III) and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation within the Anza-Borrego Link to ensure that maximum recycling activities would occur.

Public Services. Construction Workers Demands. As indicated in Section B, Project Description, Table B-42 (Project Labor Force Requirements), the workforce necessary for construction of the Proposed Project is anticipated to be a maximum of 125 personnel per link with a maximum of 800 workers overall. These workers likely live in the San Diego area and may already work for SDG&E. Therefore, they would not generate additional population that would exceed the capacity of local public service providers listed in Table D.14-2. Construction of the Proposed Project is not expected to result in a direct increase in the local population, leading to long-term demands to local public services (see also Section H.2, Growth-Inducing Effects, for a complete discussion of population impacts). Nor would the Proposed Project result in any long-term requirements that would place a permanent increased demand on emergency service providers that would result in the need for new or expanded facilities. Because of the large available labor pool in San Diego County and nearby Imperial County, few construction workers are expected to temporarily or permanently relocate to the area. Therefore, the temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection or police protection in the long-term and it would not require the construction or expansion of facilities or services (Class III).

Fire Hazards. Because the Anza-Borrego Link is primarily desert habitat with sparse vegetation, especially at the eastern end, fire risk is relatively low. Section D.15 (Fire and Fuels Management) discusses how temporary construction activities would result in an increase in potential fire hazards and would increase temporary demands for fire protection services.

Emergency Services. Construction of the project and equipment would impede emergency access through the area. With implementation of APM PSU-APM-3, SDG&E would be required to coordinate construction schedules, lane closures, and other activities associated with installation of the Proposed Project with emergency and police services ensure minimal disruption to response times and access for these services. Impacts to emergency access are discussed under Section D.9 (Transportation and Traffic), which concludes that such impacts would be less than significant. Therefore, impacts to emergency access and/or public services and facilities would be less than significant (Class III) and no mitigation measure is required.

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Increased demands on emergency services would occur if operation of the Proposed Project would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in greater detail in Section D.15 (Fire and Fuels Management) and is not addressed in this section.

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III)

All of the revenue generated by ABDSP itself (see Table D.14-9) goes into the State's General Fund, and therefore, any change in money generated at the Park would be only a fraction of the total State budget and it would not impact the Park's distribution for the following year.

Although there would be a significant and unmitigable impact to Wilderness and Recreation (see Impact WR-2 [Presence of a transmission line or substation would permanently change the character of a recreation area, diminishing its recreational value] in Section D.5), visitors generally travel to ABDSP to enjoy the wildflower blooms and the habitat. ABDSP would still draw visitors despite presence of the transmission line and significant diminishment of the recreational experience in areas of the Park once the short-term construction disturbances (especially due to noise, traffic, and visual resources) are completed.

Visitors may also visit other areas of the Park where there are no transmission lines. It is possible that the presence of the new transmission line would result in a decrease in visitors to the Park, as discussed in Section D.5.6 (Wilderness and Recreation). However, it would be speculative to extrapolate that indirect tourism industry revenues, purchases at the Visitors' Center or contributions to ABFI would decrease. Therefore, this impact would be less than significant (Class III) and no mitigation measure is required.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class II)

Water. During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be trucked to the individual structures and would be obtained from the IID power plant in El Centro; however, compared to water usage during project construction and compared to IID's overall water supply, water for washing would be minor and impacts on existing resources and suppliers would be less than significant (Class III).

Increased Patrol. Construction of the proposed SRPL would require the construction of eight miles of additional vehicle access roads in the Park and the construction of approximately 139 spur roads to access the tower locations. These roads would create new points of access to the public in areas that have extremely sensitive natural and cultural resources. The presence of the Proposed Project, including the substantial number of spur roads, may increase the need for law enforcement and public safety services as visitors, both on foot and in vehicles, would be able to make use of the spur roads.

All of the new roads would be generally parallel to and/or nearby existing roads (Old Kane Springs Road, SR78, and Grapevine Canyon Road) and the overall area of the Park would not increase. The farthest distance between an existing road and new permanent access road would be approximately 700 feet for a length of approximately 1.5 miles where the proposed route would jog north to avoid the Angelina Springs cultural district along Grapevine Canyon Road. However, the terrain in ABDSP is broken, uneven, and there are large plants and boulders that vehicles and people could be concealed behind. A study by the National Park Service revealed that most vandalism of cultural sites happens within approximately 100 meters of a road (Christensen et al., 1988). The new access and spur roads would increase the amount of area within 100 meters of roads and would create a potential strain on existing service requirements, especially in the sensitive areas around Yaqui Well and Angelina Springs that are rich in cultural resources. Implementation of Mitigation Measure S-3c would ensure that adequate law enforcement and safety personnel are available would reduce this potential impact to less than significant.

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3c Ensure adequate law enforcement and safety personnel. SDG&E shall consult with ABDSP and shall provide additional personnel, equipment, and/or funding for increased patrol and law enforcement and public safety services, the number of personnel to be determined as deemed necessary to maintain existing levels of service as a result of increased public access from new access and spur roads. A summary of the final outcome of these negotiations shall be submitted to the CPUC and BLM at least 60 days prior to completion of construction within ABDSP.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

The BLM and ABDSP would receive no tax revenue from the installation of the Proposed Project on BLM or State lands, because local tax revenues do not accrue on federal or State lands. However, BLM does collect fees annually for ROW Grants. Within the Anza-Borrego Link the ROW width varies and the BLM existing easement is not 100 feet wide for its entire length through the Park. Section B.2.2 provides a discussion of the IID and SDG&E easements through ABDSP. For 2007 (rates are adjusted annually), BLM would receive \$43.81 per acre for a ROW in San Diego County (BLM, 2007). The money would go into the federal general fund and would not directly benefit the BLM El Centro office.

SDG&E currently pays no ROW fees to State Parks for the use of the existing transmission line easement through ABDSP; however, State Parks may implement some fee for the use of new easements that may be required by the project. The likely process would require SDG&E to hire a State-licensed real property appraiser to perform a real property appraisal that would be prepared in accordance with Department of General Services (DGS) specifications (revised July 1, 2006). DGS would then review and approve the appraisal and compensation for the additional real property interest would be based on the amount determined by this appraisal. Factors that would not be accounted for in the appraisal process, such as environmental impacts, would be compensated for via separate mitigation and/or payment to State Parks based on district staff input as to the impacts/losses (ABDSP, 2007b).

The Proposed Project would not result in an adverse change in public resource revenue. Furthermore, the Proposed Project would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Proposed Project are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are required.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the Proposed Project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities such as transmission lines in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of similar projects in the past.

Due to the public ownership of BLM and State Park lands traversed by the Proposed Project, this impact would not apply to BLM or State Park these areas.

No populations are located along the route, though there are scattered rural residences along Grapevine Canyon Road near the proposed route at the western end of this link. As discussed in Section D.14.5.1, numerous studies conclude that any property value effects are usually smaller than anticipated and essentially impossible to generally quantify due to the individuality of properties/neighborhoods, differences in personal preferences of individual buyers/sellers, and the weight of other factors that contribute to a person's decision to purchase a property. Other factors (e.g., neighborhood factors, square footage, size of lot, irrigation potential) are much more likely than overhead transmission lines to be major determinants of the sales price of property (Kroll and Priestley, 1992). In addition, across the board, studies have generally concluded that over time any adverse property value impacts diminish and within five years the change is negligible.

In addition, as noted in Section D.14.2, this portion of the Proposed Project would be constructed within and adjacent to existing 69 kV corridor, where a transmission line already exists. Incremental effects on property values that may result from the changes within the corridor resulting from this project would be even smaller and more difficult to quantify. The line would be located within an existing BLM easement and there is an existing transmission line corridor through the area. As a result, any changes in property values would not be a substantial decrease and this impact is considered to be less than significant (Class III). Although not required, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would help to reduce the visual impacts of the project, which is one of the components perceived to affect property values.

D.14.7 Central Link Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class II for agricultural revenues, Class III for business revenues, Class IV for economic benefits)

Revenue from Business Operations. A wide range of land uses are near to the Proposed Project route, including commercial and industrial uses, rural residences, agricultural and/or ranching uses, Vista Irrigation District (VID) land, Santa Ysabel Reservation, Cleveland National Forest, and County preserve land. While business uses occur along the route, the project would not require the removal or relocation of any business uses.

Impacts on local businesses in Santa Ysabel would result from visual impacts, vehicular or pedestrian access impacts, land use impacts, or health and safety concerns (such as EMF and air emissions). These issues and potential impacts are analyzed extensively in this document in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety). Where Proposed Project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated local business revenue impacts would not be significant. In addition, most impacts would be short-term construction impacts and because no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no specific mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Revenue from Agricultural Operations. Within the Central Link and as described in Section D.6 (Agricultural Resources), creation of a new 200- or 300-foot ROW and access roads would not preclude agricultural use of these lands, except at the tower locations (121 230 kV steel poles or towers and 117 69 kV poles). Steel poles would have a disturbance area of 64 square feet and lattice towers would have a disturbance area of 79 square feet.

Construction of new 230 kV towers in these areas would also require construction equipment to traverse agricultural land. Throughout the Central Link, 36.4 miles of new access roads would be created. Section D.6 discusses the land under active agricultural operation (grazing land) within the Central Link that would be impacted by construction activities, including activities associated with the construction of an overhead single-circuit 500 kV transmission line from the existing Imperial Valley Substation to the eastern boundary of the ABDSP. Specifically, this would involve the construction and/or expansion of access roads, the installation of tower structures and wires, and the presence/staging of construction equipment and vehicles. This would temporarily restrict grazing and/or crop production and/or would potentially damage crops if activities occurred during the growing season. The restriction of crop production or damage to crops would potentially decrease revenues for the agricultural landowners whose crops would be affected by project activities (Class II).

As part of the Proposed Project, APMs would be implemented to reduce the effects of construction on businesses. Specifically, APMs LU-1, LU-3 through LU-7, and LU-10 include measures to: (1) provide advanced notification to individuals within 300 feet of construction activities; (2) minimize/avoid construction in agricultural areas during certain seasons, and/or compensate farmers for project-related losses of crops or other pertinent agricultural resources; (3) provide alternate access for affected individuals; (4) coordinate construction activities with water management representatives; (5) confine construction activities to predetermined limits of construction; and (6) minimize/avoid interference of construction with the operation of agricultural equipment. Table D.14-7 describes the applicable APMs. With implementation of the APMs, including avoiding placement of facilities (such as new access roads) in active agricultural areas and locating facilities along the edge of active agriculture, direct impacts to farmland would be less than significant (see Impact AG-2 in Section D.6). Finally, APM LU-3 states that farmers (or other applicable parties) will be compensated for project-related losses of crops or other pertinent agricultural resources based upon a professional appraisal. As discussed in Section D.6, Mitigation Measure Ag-1a would also require that SDG&E coordinate with property owners and tenants to ensure that project construction would be conducted so as to avoid interference with agricultural operations. Because impacts to Active Agricultural Operations would be less than significant during construction, any associated impacts to crop and/or grazing revenues would be less than significant, and farmers would be compensated for crop loss (APM-LU-3). Therefore, no additional mitigation measures are recommended outside of those presented in Section D.6 (Agricultural Resources) to

mitigate potential impacts that would result in a substantial change to local agricultural revenues. The full text of the mitigation measures can be found in Appendix 12.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV), such as around the Santa Ysabel Valley and the nearby town of Julian.

Mitigation Measures for Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments

- AG-1a Avoid interference with agricultural operations.
- AG-1c Coordinate with grazing operators.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II for agricultural land, Class III)

Construction of this link of the Proposed Project and related infrastructure has the potential to disrupt existing collocated utility lines, such as the existing 69 kV line from Grapevine Canyon, which would be underbuilt on the 500 kV towers, and the Warners-Santa Ysabel 69 kV transmission line that would be relocated from MP 100.2 to 109.4. As described above in Section D.14.2.3, the route would parallel and cross several transmission lines in the Central Link. The acquisition of and construction within an existing or new ROW would result in the collocation of new towers and power lines adjacent to and/or crossing existing utility lines. In the agricultural/ranching lands there is also the potential to cross and/or parallel existing water irrigation lines that could be damaged during tower excavation. Therefore, there would be potential for service interruptions of these utilities during construction of the Proposed Project.

There would be potential for service interruptions of 69 kV utilities that would be underbuilt (MP 83.5 to MP 87.6) or relocated (MP 100.2 to MP 109.4) during construction of the Proposed Project. Installation of new towers and circuits would occur with the existing system in service. The cutover to the new line would involve a switching maneuver that would interrupt service momentarily at most. Electrical systems are designed with redundant means to provide service. If it is necessary to take a particular circuit out of service, SDG&E would first ensure that a redundant feed is available as not to interrupt service.

Construction of the Central Link would be overhead and tower excavation would not be within any road-ways. In addition, under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the Proposed Project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with the California Government Code §§4216-4216.9 (see Anza–Borrego Link discussion for more detail) and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions. In addition, the Central Link would be overhead and so there would be very little ground disturbance of heavily used underground utility corridors, such as roads. Therefore, potential impacts related to a collocation accident or utility disruption would be less than significant (Class III). No mitigation measure is required.

Agricultural Lands. On off-road agricultural lands, there is the potential to accidentally disrupt underground irrigation pipes during excavation or other ground disturbing construction activities (Class II). However, Mitigation Measure AG-1a (Avoid interference with agricultural operations) requires that SDG&E must coordinate with property owners and tenants to ensure that project construction will be conducted so as to avoid interference with agricultural operations. Implementation of Mitigation Measure AG-1a would reduce impacts to Active Agricultural Operations and disruption to existing agricultural irrigation systems to less than significant levels.

Mitigation Measure for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

AG-1a Avoid interference with agricultural operations.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Water. Water would be required during project construction for dust abatement and cleaning construction equipment, as well as making concrete for foundations. The amount of water required depends on the length of access roads used, weather conditions, road surface conditions, and other site-specific conditions. Dust suppression efforts would occur on each day that grading activities take place and when construction vehicles use unpaved access roads. During clearing and grading activities and throughout project construction an average of 27,000 gallons per day of water would be used for dust control and 36 gallons/yard³ would be used for tower construction (see Table B-5). Water consumption for these purposes would also vary depending on use of water or soil binders on unpaved roads, staging areas, and parking areas, which would substantially minimize water use. Water would also be needed to make the concrete used during project construction and is often used to lubricate the auger during boring operations. Comparatively small amounts of potable water would be needed for sanitary and drinking purposes. Estimated total water usage by link is listed in Table B-4a in Section B.

Water use during project construction would be a comparatively small fraction of the total water supply for the jurisdictions affected by the Proposed Project, such as VID, and would not change the ability of the water suppliers identified in Section D.14.2.3 to serve the project area demands. VID provides an average of approximately 20 mgd and water for the project would be provided by the output of one or two wells out of VID's 12 or so producing wells (VID, 2007a). Therefore, the water demand for construction of the Proposed Project would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the individual links, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Waste management companies that serve San Diego County are discussed under Section D.14.2.3. The closest landfill to this area would be the Ramona Landfill (20630 Pamo Road), east of the Central Link, which allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic yards (CIWMB, 2007). It accepts agricultural, construction/demolition, mixed municipal, sludge (biosolids), tires, and wood waste. Proposed Project Construction would generate waste largely in the form of soil, concrete from existing foundations, utility line cable, and scrap metal/wood from the replacement of existing towers. Approximately 25 percent of the excavated material would be clean and dry and would be "spread" along the ROW. Section D.10 (Public Health and Safety) discusses impacts in the event contaminated soil is encountered. The Proposed Project in the Central Link would include the removal of 9.2 miles of existing 69 kV transmission line (including 116 wood poles). As described in

Section B.4.98 (Removal of Facilities and Waste Disposal), the conductor would be coiled and hauled off site to a recycling facility. Existing wood poles would be removed by cutting the pole at the ground level, leaving the embedded portion in place. The wood poles, insulators, cross arms and all other associated hardware would be disposed of at an offsite location. Because the wood poles are treated, they may need to be disposed of at a facility that accepts treated wood, such as the Sycamore Sanitary Landfill (8514 Mast Boulevard), which allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards (CIWMB, 2007).

Estimated solid waste generation for excavation and other construction activities is listed in Section B.4.98 (Removal of Facilities and Waste Disposal). As identified in Table D.14-2, the project route is served by a variety of waste management agencies and landfills. Due to the number and capacity of landfills serving the project area, capacity for materials generated from construction of the Proposed Project would be available. Because the exact amount of material recycling is unknown, the total amount of waste requiring landfill disposal is unknown. Recycling activities would greatly reduce the quantity of construction-related materials transported to local landfills.

As the waste generated by the Proposed Project would occur over a 30-month period and be dispersed among the various landfills serving the entire project route, the daily waste exported off site would be a fraction of the maximum daily throughput for any of the landfills identified in Table D.14-2. Therefore, construction waste generated by the Proposed Project would not substantially affect the remaining capacities of local landfills to serve local demands (Class III). Although impacts to solid waste facilities would not be significant (Class III) and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation within the Central Link to ensure that maximum recycling activities would occur for the entire project.

Public Services. Construction Workers Demands. Construction of the Proposed Project would not result in a direct increase in the local population, leading to long-term demands to local public services (see also Section H.2, Growth-Inducing Effects, for a complete discussion of population impacts). Nor would the Proposed Project result in any long-term requirements that would place a permanent increased demand on emergency service providers that would result in new or expanded facilities. As discussed under Impact S-3 for the Imperial Valley Link, the temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection or police protection in the long-term and it would not require the construction or expansion of facilities or services (Class III).

Fire Hazards. Section D.15 (Fire and Fuels Management) discusses how temporary construction activities would result in an increase in potential fire hazards and would increase temporary demands for fire protection services.

Emergency Services. Construction of the project and equipment would impede emergency access through the area. With implementation of APM PSU-APM-3, SDG&E would be required to coordinate construction schedules, lane closures, and other activities associated with installation of the Proposed Project with emergency and police services to ensure minimal disruption to response times and access for these services. Impacts to emergency access are discussed under Section D.9 (Transportation and Traffic), which concludes that such impacts would be less than significant. Therefore, impacts to emergency access and/or public services and facilities would be less than significant (Class III) and no mitigation measure is required.

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

From an operational perspective, presence of the transmission line and associated facilities would not disrupt actual use of business properties or structures. Access to all businesses would be fully restored once construction of the project is complete. The transmission line would be located near business properties, but it would not remove any businesses along the route or cause any use to change. In light of the aforementioned reasons, no business-related impacts would occur and there would be no substantial change in revenues during operation (Impact S-1).

Increased demands on emergency services would occur if operation of the Proposed Project would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in greater detail in Section D.15 (Fire and Fuels Management) and is not addressed in this section. There is also the potential for a socioeconomic effect on local communities and other values at risk as a result of fire hazard, because a project-related fire or a fire that grows larger as a result of the presence of the project would have a significant effect on local communities. Cost of fire suppression is also discussed in Section D.15 (Fire and Fuels Management) and is not addressed here.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be obtained from SDG&E's Kearny O&M District and would be trucked to the individual structures; this facility is owned by SDG&E and ample water is available for insulator washing. Therefore, impacts on existing resources and suppliers would be less than significant given the minimal expected water usage during project construction and maintenance and SDG&E's overall supply at the facility (Class III).

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. SDG&E's property taxes would increase as a result of the Proposed Project. The State of California Board of Equalization (BOE) assesses infrastructure facilities annually. Dispersion of property tax revenue is determined at a local level based upon the location of the taxable property. Any increase in property tax revenue as a result of the Proposed Project would result in a beneficial impact to the local economy as a result of tax revenue spending.

The Proposed Project would not result in an adverse change in public resource revenue. Furthermore, the project would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Proposed Project are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the Proposed Project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, the discussion of Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities such as transmission lines in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects.

The Central Link contains large areas of open space in the mostly undeveloped valleys and surrounding mountains. The area also hosts small rural residential communities and dispersed residences. The Proposed Project in this area would include construction of a new corridor that would include a 230 kV line with 120-foot lattice towers with a median span between towers of 910 feet, as well as a relocated 69 kV line with 60- to 100-foot steel poles with a median span of 425 feet. Although there would be significant and unmitigable (Class I) impacts to visual resources, as discussed in Section D.14.5.1, numerous studies conclude that any property value effects are usually smaller than anticipated and essentially impossible to generally quantify due to the individuality of properties/neighborhoods, differences in personal preferences of individual buyers/sellers, and the weight of other factors that contribute to a person's decision to purchase a property. Other factors (e.g., neighborhood factors, square footage, size of lot, irrigation potential) are much more likely than overhead transmission lines to be major determinants of the sales price of property (Kroll and Priestley, 1992). In addition, across the board, studies have generally concluded that over time any adverse property value impacts diminish and within five years the change is negligible. As a result, any changes in property values would not be a substantial decrease and this impact is considered to be less than significant (Class III). Although not required, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would help to reduce the visual impacts of the project, which is one of the components perceived to affect property values.

Although this impact would be adverse but less than significant, it should also be noted that implementation of one of the SWPL Alternatives, the Santa Ysabel All Underground Alternative, the Santa Ysabel Partial Underground Alternative or the Santa Ysabel Existing ROW Alternative (which parallels an existing transmission line corridor), described and analyzed later in this report would reduce some of the significant visual impacts in the valley.

Proposed Central East Substation

As a result of the remote location of the substation, Impact S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses) would not occur. Around the time of publication of the Notice of Preparation (September 15, 2006), which sets the time of EIR/EIS baseline environment, SDG&E purchased the Central East Substation property and has been paying property taxes on it so no change would occur. Furthermore, whether or not the Proposed Project is constructed, SDG&E will own the proposed Central East Substation property and will pay property taxes on it. Therefore, Impact S-4 (Property tax revenues and/or fees from project presence would substantially benefit public agencies) also would not occur.

Environmental Impacts and Mitigation Measures

As discussed in Section B.5.1, once constructed, general substation monitoring and control functions are performed remotely from SDG&E central operations facility in San Diego. Regular operation would require one or two workers to visit the substation on a weekly basis.

Construction Impacts

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

The proposed Central East Substation would be located on vacant land owned by SDG&E in a sparsely developed area with very few residences scattered around the substation vicinity. Therefore, the likelihood of encountering utility systems is low. However, there are scattered residences in the area and a 1.07-mile, 14- to 20-foot-wide access road from Highway S2 to the substation gate would be installed. In addition there would be extensive grading and earthwork and approximately 1.5 to 1.8 million cubic yards of cut and fill earthwork would be needed. Therefore, during grading and access road installation there is the potential to encounter and disrupt existing underground utilities in the San Felipe rural community.

In addition, under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the Proposed Project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §\$4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §\$4216-4216.9 (see Anza-Borrego Link impact discussion for more detail) and APMs PSU-APM-1 and PSU-APM-2 would ensure that the potential impacts related to a collocation accident or utility disruption would be less than significant (Class III). No mitigation measure is required.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Water. The San Diego County Water Authority (SDCWA) provides up to 97 percent of the water used in the San Diego County region, importing from a single supplier, the Metropolitan Water District of Southern California (SDG&E, 2006). Water would be required during substation construction for dust abatement (especially during the extensive grading and earthwork) and cleaning construction equipment. Grading and site work would require an estimated 600,000 gallons/day of water, landscape would use 190,000 gallons/day, and concrete for the substation construction would use an estimated 10,000 gallons/day of water (160,000 total gallons from the temporary batch plant). The amount of water required depends on the length of access roads used (approximately 1.07 miles), weather conditions, road surface conditions, and other site-specific conditions. Dust suppression efforts would occur on each day that grading activities take place and when construction vehicles use unpaved access roads. Water consumption for this purpose would also vary depending on the use of soil binders on unpaved roads, staging areas, and parking areas, which would substantially minimize water use. Water would also be needed to make the concrete used during project construction (160,000 gallons total). Comparatively small amounts of potable water would be needed for sanitary and drinking purposes. Estimated total water usage for the proposed Central East Substation is listed in Table B-4a in Section B.

Water use during project construction would be a comparatively small fraction of the total water supply for the jurisdictions affected by the Proposed Project and would not change the ability of the water suppliers identified in Table D.14-2 to serve the project area demands. Water would be supplied by VID wells to a new 4-acre batch plant on site and as described for the Central Link, it would not affect VID ability to supply its customers. Therefore, the water demand for construction of the Proposed Project would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the individual links and during substantial grading at the substation site, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Proposed Project Construction would generate waste largely in the form of soil from extensive earthwork and grading. No existing structures would be removed. Estimated solid waste generation for excavation and other construction activities is listed in Section B.4.98 (Removal of Facilities and Waste Disposal). Total solid waste generation would include 2,400 cubic yards for substation grading/site work, 3,500 cubic yards for below-grade substation construction, and 2,500 cubic yards for above-grade substation construction. Waste management companies that serve San Diego County are discussed under Section D.14.2.3 and under Impact S-3 in the Anza-Borrego Link above. The closest landfills to this area would be the Ramona Landfill, east of the Central Link, or the Borrego Springs Landfill discussed above. Due to the number and capacity of landfills serving the project area, capacity for materials generated from construction of the Central East Substation would be available.

As the waste generated during construction of the Central East Substation would occur over a 30-month period (see Table B-10 in Section B.4.7, Construction Schedule) and be dispersed among the various landfills serving the entire project route, the daily waste exported off site would be a minute fraction of the maximum daily throughput for any of the landfills identified in Table D.14-2. Therefore, construction waste generated by the Proposed Project would not substantially affect the remaining capacities of local landfills to serve local demands (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation for Central East Substation construction to ensure that maximum recycling activities would occur.

Public Services. Construction Workers Demands. Because of the large available labor pool in San Diego County and nearby areas, few construction workers are expected to temporarily relocate to the area. These workers likely live in the San Diego area and may already work for SDG&E. Therefore, they would not generate additional population that would exceed the capacity of local public service providers listed in Table D.14-2. Construction of the Proposed Project would not result in a direct increase in the local population, leading to long-term demands to local public services (see also Section H.2, Growth-Inducing Effects, for a complete discussion of population impacts). Nor would the Proposed Project result in any long-term requirements that would place a permanent increased demand on emergency service providers that would result in new or expanded facilities. Therefore, the temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection or police protection in the long-term and it would not require the construction or expansion of facilities or services (Class III).

Fire Hazards. Section D.15 (Fire and Fuels Management) discusses how temporary construction activities would result in an increase in potential fire hazards and would increase temporary demands for fire protection services.

Emergency Services. Construction of the project and equipment would impede emergency access through the area. With implementation of APM PSU-APM-3, SDG&E would be required to coordinate construction schedules, lane closures, and other activities associated with installation of the Proposed Project with emergency and police services to ensure minimal disruption to response times and access for these services. Impacts to emergency access are discussed under Section D.9 (Transportation and Traffic), which concludes that such impacts would be less than significant. Therefore, impacts to emergency access and/or public services and facilities would be less than significant (Class III) and no mitigation measure is required.

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Impact S-5: Presence of the project would decrease property values (Class III)

Because SDG&E owns the proposed Central East Substation site, no direct impacts would occur to the substation property. Between MP 91 and 92, two to three residences are located between 550 feet (south) and 900 feet (southwest) of the proposed substation. Although the visual impact of the substation is considered to be significant and unmitigable (Class I) due to the visual sensitivity of the area, these properties would be far enough from the substation site that as discussed in the studies described in Section D.14.5.1, any impacts to property value would be less than significant. The structures would cause some partial view blockage of the background hill slopes and ridges, but as found in the Crockett Cogeneration Project study, it has not been demonstrated that a view obstruction would be a major factor in a property value decline. Coupled with distance from the facility and the fact that studies have found that any adverse property value impacts diminish within five years of completion of the project, this impact would be less than significant (Class III).

D.14.8 Inland Valley Link Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class II for agricultural revenues, Class III for business revenues, Class IV for economic benefits)

Revenue from Business Operations. Within the Inland Valley Link, the Proposed Project would cross primarily open space land as well as urban areas, including residential land uses. A portion of the link would be placed underground through the San Diego Country Estates residential development where residences adjacent to the proposed route are within 30 feet of the existing ROW. This link would also cross portions of the Cleveland National Forest, Mount Gower County Open Space Preserve, and would parallel the northern border of Sycamore Canyon County Open Space Preserve. Between MP 120 and MP 121, route would pass some commercial land uses, such as San Diego Country Estates Pump Station, The Country Village (neighborhood shopping center), Ramcor MFG, Inc./AJ Storage, and San Vicente Golf Club in unincorporated San Diego County.

Impacts on local businesses would potentially result from visual impacts, vehicular or pedestrian access impacts, land use impacts, noise, air emission, or health and safety concerns (such as EMF). These issues and potential impacts are analyzed extensively in this document in Sections D.3 (Visual Resources),

D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety). Where Proposed Project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated local business revenue impacts would not be significant. In addition, because most impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no specific mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Revenue from Agricultural Operations. Within the Inland Valley Link and as described in Section D.6 (Agricultural Resources), the proposed route would create a new ROW through of agricultural lands in the Inland Valley Link, thereby impacting active operations, which are primarily as grazing lands and some vineyards. A new 200-foot-wide 230 kV ROW would be required from MP 110.8 to MP 117.2 (where the line would transition underground). This would not preclude the agricultural use of these lands, except at the tower locations. From MP 121.9 (where the line would transition back to overhead) to the Sycamore Canyon Substation (MP 136.3), the route would be located in existing 200-or 100-foot ROWs. Within the Inland Valley Link, 125 double-circuit 230 kV poles or lattice towers and 4 single-circuit 230 kV transition structures would be required, each with a disturbance area of 64 square feet (pole) or 79 square-foot (lattice tower). The underground portion of the route would be located in existing roadways within Mount Gower Open Space Preserve, Gunn Stage Road, and San Vicente Road.

Construction of the project throughout the link would require construction equipment to traverse the agricultural land. Section D.6 discusses the land under active agricultural operation within the Inland Valley Link that would be impacted by construction activities involving the construction and/or expansion of access roads, the installation of tower structures and wires, and the presence/staging of construction equipment and vehicles. This would temporarily restrict grazing and/or crop production and/or would potentially damage crops if activities occurred during the growing season. The restriction of crop production or damage to crops would potentially decrease revenues for the agricultural land-owners whose crops would be affected by project activities (Class II).

As part of the Proposed Project, APMs would be implemented to reduce the effects of construction on businesses. Specifically, APMs LU-1, LU-3 through LU-7, and LU-10 include measures to: (1) provide advanced notification to individuals within 300 feet of construction activities; (2) minimize/avoid construction in agricultural areas during certain seasons, and/or compensate farmers for project-related losses of crops or other pertinent agricultural resources; (3) provide alternate access for affected individuals; (4) coordinate construction activities with water management representatives; (5) confine construction activities to predetermined limits of construction; and (6) minimize/avoid interference of construction with the operation of agricultural equipment. Table D.14-7 describes the applicable APMs. With implementation of the APMs, including avoiding placement of facilities (such as new access roads) in active agricultural areas and locating facilities along the edge of active agriculture, direct impacts to farmland would be less than significant (see Section D.6). Finally, APM LU-3 states that farmers (or other applicable parties) will be compensated for project-related losses of crops or other pertinent agricultural resources based upon a professional appraisal. As discussed in Section D.6, Mitigation Measure Ag-1a would also require that SDG&E coordinate with property owners and tenants to ensure that project construction would be conducted so as to avoid interference with agricultural operations. Because impacts to Active Agricultural Operations would be less than significant and farmers would be compensated for crop loss (APM LU-3), any associated impacts to crop and/or grazing revenues would be less than significant. Therefore, no additional mitigation measures are recommended

outside of those presented in Section D.6 (Agricultural Resources) to mitigate potential impacts that would result in a substantial change to local agricultural revenues. The full text of the mitigation measures can be found in Appendix 12.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in San Diego County, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV), especially in the town of Ramona and the surrounding area.

Mitigation Measures for Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments

- AG-1a Avoid interference with agricultural operations.
- AG-1c Coordinate with grazing operators.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Construction of this link of the Proposed Project and related infrastructure has the potential to disrupt existing collocated utility lines, such as other electrical utility lines within the existing ROW or during 4.7 miles of underground construction, as a result of potential accidents. As described above in Section D.14.2.4, the route would parallel and cross several transmission lines and pass adjacent to San Diego Country Estates Pump Station (MP 120) and San Vicente Wastewater Treatment Plant (MP 121.4), both of which would have associated pipelines along the underground segment. After probing within the street or street shoulder, a route for the alignment within the easement would be defined that does not affect existing utilities. Although there is adequate space in the roadway, because underground line construction involves more construction in close proximity to existing utilities on a mile-per-mile basis than overhead construction, the chances of underground line construction activities causing an accidental utility service interruption are greater than for overhead construction. Trenching in the public ROW could accidentally damage one or more existing utilities along the proposed underground route. Therefore, there would be potential for service interruptions of these utilities during construction of the Proposed Project.

Some service disruptions during construction would potentially be unavoidable at a few locations along the proposed ROW. These disruptions would occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. As described above, intentional service interruption during construction could be unavoidable and without notification of the public would significantly hinder activities in the surrounding areas. These impacts are considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

Section B.4.1.2 states that approximately two feet or five feet, respectively, would be required in areas where the SRPL underground transmission line would run perpendicular or parallel to non-electrical utilities that operate at normal soil temperature (gas lines, telephone lines, water mains, storm drains, sewer lines). In addition, under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the Proposed Project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Govern-

ment Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §§4216-4216.9 (see Anza–Borrego Link impact discussion for more detail) and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions; however, accidental disruptions could still occur (especially during the underground segment). This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities).

Agricultural Lands. On off-road agricultural lands, there is the potential to accidentally disrupt underground irrigation pipes during excavation or other ground disturbing construction activities (Class II). However, Mitigation Measure AG-1a (Avoid interference with agricultural operations), specifies that SDG&E must coordinate with property owners and tenants to ensure that project construction will be conducted so as to avoid interference with agricultural operations. Implementation of Mitigation Measure AG-1a would reduce impacts to Active Agricultural Operations and disruption to existing agricultural irrigation systems to less than significant levels.

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

AG-1a Avoid interference with agricultural operations.

S-2a Notify public of utility service interruption.

S-2b Protect underground utilities.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Water. Water would be required during project construction for dust abatement and cleaning construction equipment. The amount of water required depends on the length of access roads used, weather conditions, road surface conditions, and other site-specific conditions. Dust suppression efforts would occur on each day that grading activities take place and when construction vehicles use unpaved access roads. During clearing and grading activities and throughout project construction an average of 27,000 gallons per day of water would be used for dust control and 36 gallons/yard³ would be used for tower construction from batch plants (see Table B-5). Water consumption for this purpose would also vary depending on the use of soil binders on unpaved roads, staging areas, and parking areas, which would substantially minimize water use, and reclaimed water could be used as available. Water would also be needed from batch plants to make the concrete used during project construction and is often used to lubricate the auger during boring operations. Comparatively small amounts of potable water would be needed for sanitary and drinking purposes. Estimated total water usage by link is listed in Table B-4a in Section B.

Water for concrete at batch plants and for dust control would be obtained largely from the Ramona Municipal Water District and the City of Poway Public Services municipal water supply, depending on location (see Table B-4b in Section B and Section D.14.2.4 above). Ramona Municipal Water District has a yearly output of 2,486,243,103 gallons of potable water and the amount of water required for construction would be relatively small; however, depending on where (i.e., the specific location) and when (i.e., during the dry summer months) the water is removed may have an impact on the system. If so, reclaimed water would be available (Ramona Municipal Water District, 2007).

The City of Poway has a daily theoretical maximum of 24 mgd, with an actual maximum of 22 mgd and an average output of 16 mgd. Supplying water for construction of the project would not have an impact due to the comparatively small amount required (approximately 0.03 mgd). However, if there is drought

during the summer months, water restrictions may be imposed. During that time, reclaimed water would be available from a plant at the southern end of the city (City of Poway, 2007).

SDG&E would have to contract with providers to obtain reclaimed water where it is available, and its use would reduce the amount of potable water needed from local water districts. In the event that water suppliers are not able to supply the full amount of water required during construction in the summer months, alternative means of procuring water and/or reducing water usage would be available as not to significantly impact water suppliers (Class III). For example, the use of soil binders (see Mitigation Measure AQ-1a) and reclaimed water would reduce water usage, and nearby districts have available water to serve the Proposed Project if necessary. No mitigation measure is required; however, implementation of Mitigation Measure S-3b (Use reclaimed water), would further reduce impacts on local and regional water supplies by encouraging use of reclaimed water where possible. Please see the explanation of mitigation for less than significant impacts in Section D.1.5.1.

Solid Waste. Proposed Project construction would generate waste largely in the form of soil, concrete from existing foundations, utility line cable, and scrap metal/wood from the replacement of existing towers. Approximately 50 percent of the excavated material would be clean and dry and would be "spread" along the ROW. Section D.10 (Public Health and Safety) discusses impacts in the event contaminated soil is encountered. The Proposed Project in the Inland Valley Link would include the removal of 5 wood poles associate with a one-mile re-route of the existing Santa Ysabel-Creelman 69 kV transmission line near MP 111.3 to move the line off of Cleveland National Forest land. As described in Section B.4.98, Removal of Facilities and Waste Disposal, the conductor would be coiled and hauled off site to a recycling facility. Existing wood poles would be removed by cutting the pole at the ground level, leaving the embedded portion in place. The wood poles, insulators, cross arms and all other associated hardware would be disposed of at an offsite location. There would also be waste generated from roadway material during trenching for underground construction.

Estimated solid waste generation for excavation and other construction activities is listed in Section B.4.98, Removal of Facilities and Waste Disposal. As identified in Table D.14-4, the project route is served by a variety of waste management agencies and landfills. Under this alternative there would be no structure removal. The closest landfills would be the Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic and the Sycamore Sanitary Landfill (8514 Mast Boulevard) that allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards (CIWMB, 2007). The Ramona Landfill accepts agricultural, construction/demolition, mixed municipal, sludge (biosolids), tires, and wood waste. The Sycamore Sanitary Landfill accepts asbestos, contaminated soil, mixed municipal waste, sludge (biosolids), agricultural, dead animals, tires, shreds, and wood waste (including treated wood). Due to the number and capacity of landfills serving the project area, capacity for materials generated from construction of the Proposed Project would be available. Because the exact amount of material recycling is unknown, the total amount of waste requiring landfill disposal is unknown. Recycling activities would greatly reduce the quantity of construction-related materials transported to local landfills.

As the waste generated by the Proposed Project would occur over a 30-month period and be dispersed among the various landfills serving the entire project route, the daily waste exported off site would be a fraction of the maximum daily throughput for any of the landfills identified in Table D.14-4 and discussed above and the landfills have adequate remaining capacity. Therefore, construction waste generated by the Proposed Project would not substantially affect the remaining capacities of local landfills to serve local demands (Class III). Although impacts to solid waste facilities would not be significant (Class III) and no mitigation measure is required, to further reduce adverse effects of the cumulative

volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation within this link to ensure that maximum recycling activities would occur for the entire project.

Public Services. Construction Workers Demands. Construction of the Proposed Project would not result in a direct increase in the local population, leading to long-term demands to local public services (see also Section H.2, Growth-Inducing Effects, for a complete discussion of population impacts). Nor would the Proposed Project result in any long-term requirements that would place a permanent increased demand on emergency service providers that would result in new or expanded facilities. As discussed under Impact S-3 for the Imperial Valley Link, the temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection or police protection in the long-term and it would not require the construction or expansion of facilities or services (Class III). The project would not preclude access to and thus would have no socioeconomic impact on Barnett Elementary School, which the route would pass nearby around MP 119.

Fire Hazards. Section D.15 (Fire and Fuels Management) discusses how temporary construction activities would result in an increase in potential fire hazards and would increase temporary demands for fire protection services.

Emergency Services. Construction of the project and equipment would impede emergency access through the area. With implementation of APM PSU-APM-3, SDG&E would be required to coordinate construction schedules, lane closures, and other activities associated with installation of the Proposed Project with emergency and police services to ensure minimal disruption to response times and access for these services. Impacts to emergency access are discussed under Section D.9 (Transportation and Traffic), which concludes that such impacts would be less than significant. Therefore, impacts to emergency access and/or public services and facilities would be less than significant (Class III) and no mitigation measure is required.

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

From an operational perspective, presence of the transmission line and associated facilities would not disrupt actual use of business properties or structures. Access to all businesses would be fully restored once construction of the project is complete. The transmission line would be located near business properties, but it would not remove any businesses along the route or cause any use to change. In light of the aforementioned reasons, no business-related impacts would occur and there would be no substantial change in revenues during operation (Impact S-1).

Increased demands on emergency services would occur if operation of the Proposed Project would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in greater detail in Section D.15 (Fire and Fuels Management) and is not addressed in this section. There is also the potential for a socioeconomic effect on local communities and other values at risk as a result of fire hazard, because a project-related fire or a fire that grows larger as a result of the presence of the project would have a significant effect on local communities. Cost of fire suppression is discussed in Section D.15 (Fire and Fuels Management) and is not addressed here.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be obtained from SDG&E's Kearny O&M District (it may also be diluted with water from municipal sources) and would be trucked to the individual structures; this facility is owned by SDG&E and ample water is available for insulator washing. Therefore, impacts on existing resources and suppliers would be less than significant given the minimal expected water usage during project construction and maintenance and SDG&E's overall supply at the facility (Class III).

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. SDG&E's property taxes would increase as a result of the Proposed Project. The State of California Board of Equalization (BOE) assesses infrastructure facilities annually. Dispersion of property tax revenue is determined at a local level based upon the location of the taxable property. Any increase in property tax revenue as a result of the Proposed Project would result in a beneficial impact to the local economy as a result of tax revenue spending. The BLM, U.S. Forest Service, CDFG, DOD, Caltrans would receive no revenue from the installation of the Proposed Project on their lands, because local tax revenues do not accrue on federal or State lands, so no revenue benefits would be realized by the those federal and State agencies. However, the agencies do collect fees annually for ROW Grants. The Proposed Project would not result in an adverse change in public resource revenue. Furthermore, the Proposed Project would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Proposed Project are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the Proposed Project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities such as transmission lines in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects. Due to the public nature of the federal and State lands traversed by the Proposed Project in the Inland Valley Link, this impact would not apply to those lands.

As noted in Section D.14.2.4, most of the Inland Valley Link would be constructed within and adjacent to existing corridors where other transmission lines already exist or the 230 kV line would be installed underground adjacent to other utilities, which would eliminate visual impacts of an overhead transmission line. Incremental effects on property values that may result from the changes within the corridor resulting from this project would be very small, would diminish over time, and would be even more difficult to quantify than a new corridor. Based on the studies detailed in Section D.14.2.1, it is concluded, then, that the project within the Inland Valley Link would not generate effects that would significantly impact property values (Class III). It should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors), though not required, would help to reduce the visual impacts of the project. It should also be noted that landowners of any private parcels that would be crossed by the Proposed Project

would be compensated by SDG&E for use of its easement across the property based on the fair market value of the property taken.

D.14.9 Coastal Link Impacts and Mitigation Measures

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III for revenue, Class IV for economic benefits)

Revenue from Business Operations. A wide range of land uses are near or adjacent to the Proposed Project route, including residential, public facilities and utilities, commercial and office, industrial, and parks and recreation. While business uses occur along the route, the project would not require the removal or relocation of any business uses and the route in the Coastal Link is primarily residential and park/preserve. As discussed in Section D.6, the Coastal Link would traverse Agricultural Lands, however, none of these lands are in active agricultural operations and so there would be no impact to revenues on agricultural lands.

Impacts on local businesses would result from visual impacts, vehicular or pedestrian access impacts, land use impacts, or health and safety concerns (such as EMF). These issues and potential impacts are analyzed extensively in this document in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety). Where Proposed Project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated local business revenue impacts would not be significant. In addition, because most impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no specific mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

In addition, specifically APMs LU-1, LU-6, and LU-7 would reduce any land use impacts relating to construction activities that would affect businesses and their revenues by: (1) strictly adhering to limits of construction that would be determined prior to the start of construction activities, (2) installing Proposed Project facilities along the borders of private property, open space parks, and recreation areas, (3) coordinating with owners of adjacent land and notifying affected landowners of proposed construction activities, (4) providing avenues for the public to gain more information on the construction schedule and scope and to register complaints about construction activities, and (5) facilitating access to properties obstructed by construction activities by providing alternative access where feasible. Likewise, by reducing the physical construction impacts of the project, the APMs would also minimize any resulting lost revenues associated with the Proposed Project. Therefore, impacts to business revenues would not be significant (Class III). No mitigation measure is required.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel

would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Construction of this link of the Proposed Project and related infrastructure has the potential to disrupt existing collocated utility lines, such as other utility lines within Park Village Drive or within existing SDG&E ROWs, as a result of potential accidents. There are no Active Agricultural Operations within the Coastal Link so it would not impact underground irrigation pipes on agricultural lands. As described above in Section D.14.2.5, the route would parallel and cross several transmission lines and would be located underground for 4.3 miles. After probing within the street or street shoulder, a route for the alignment within the easement would be defined that does not affect existing utilities. Although there is adequate space in the roadway, because underground line construction involves more construction in close proximity to existing utilities on a mile-per-mile basis than overhead construction, the chances of underground line construction activities causing an accidental utility service interruption are greater than for overhead construction. Trenching in the public ROW could accidentally damage one or more existing utilities along the proposed underground route. Therefore, there would be potential for service interruptions of these utilities during construction of the Proposed Project.

Some service disruptions during construction would be unavoidable at a few locations along the proposed ROW. These disruptions would likely occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. As described above, intentional service interruption during construction would be unavoidable and without notification of the public would significantly hinder activities in the surrounding areas. These impacts are considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

Section B.4.1.2 states that approximately two feet or five feet, respectively, would be required in areas where the SRPL underground transmission line would run perpendicular or parallel to non-electrical utilities that operate at normal soil temperature (gas lines, telephone lines, water mains, storm drains, sewer lines). In addition, under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the Proposed Project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §§4216-4216.9 (see Anza-Borrego Link impact discussion for more detail) and APMs PSU-APM-1 and PSU-APM-2 would reduce the probability of a collocation accident or utility disruption; however, accidental disruptions would still occur with underground trenching. This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities). The full text of the mitigation measures can be found in Appendix 12.

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

- S-2a Notify public of utility service interruption.
- S-2b Protect underground utilities.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Water. Water would be required during project construction for dust abatement and cleaning construction equipment. The amount of water required depends on the length of access roads used, weather conditions, road surface conditions, and other site-specific conditions. Dust suppression efforts would occur on each day that grading activities take place and when construction vehicles use unpaved access roads. During clearing and grading activities and throughout project construction an average of 27,000 gallons per day of water would be used for dust control and 36 gallons/yard³ would be used for tower construction (see Table B-5). Water consumption for this purpose would also vary depending on the use of soil binders on unpaved roads, staging areas, and parking areas, which would substantially minimize water use. Water would also be needed to make the concrete used during project construction and is often used to lubricate the auger during boring operations. Comparatively small amounts of potable water would be needed for sanitary and drinking purposes. Estimated total water usage for the Coastal Link is listed in Table B-4a in Section B.

Water use during project construction would be a comparatively small amount of the total water supply for the jurisdictions affected by the Proposed Project, such as the City of San Diego Water District that has a capacity of 324.2 mgd and supplies an average of 220.45 mgd, and would not change the ability of the water suppliers identified in Tables D.14-4 and D.14-6 and Section D.14.2 to serve the project area demands (City of San Diego, 2007). Therefore, the water demand for construction of the Proposed Project would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the individual links, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Waste management companies that serve San Diego County are discussed under Section D.14.2.4 and under Impact S-3 in the Anza-Borrego Link above. The City of San Diego contracts with the following companies (and their subcontractors) for garbage and recyclables collection for incorporated areas: WMI; EDCO; Pacific Waste Services; Allan Company; Daily Disposal Services, Inc.; Debris Box; Dependable Disposal and Recycling; Emerald Waste and Recovery, Inc.; Express Waste and Roll-Off Services; John Smith Earthworks, Inc.; Tayman Industries; and Ware Disposal Company, Inc.

Poway contracts with EDCO for garbage and recyclables collection. The Sycamore Sanitary Landfill and Otay Landfill accommodate Poway's waste disposal needs. The total amount landfilled per year is 67,067 tons (SDG&E, 2006).

The following landfills accommodate San Diego's waste disposal needs: Ramona Landfill, Borrego Springs Landfill, Otay Landfill, West Miramar Sanitary Landfill, Sycamore Sanitary Landfill, San Onofre Landfill, and Las Pulgas Landfill. The total amount landfilled per year is 1,987,886 tons. The closest landfills would be the Sycamore Sanitary Landfill (8514 Mast Boulevard) that allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards and the West Miramar Sanitary Landfill (5180 Convoy Street) that has a maximum permitted throughput of 8,000 tons/day and has a remaining capacity of 13,687,454 cubic yards (CIWMB, 2007). The Sycamore Sanitary Landfill accepts asbestos, contaminated soil, mixed municipal waste, sludge (biosolids), agricultural, dead animals, tires, shreds, and wood waste (including treated wood). The West Miramar Sanitary Landfill accepts construction/demolition, mixed municipal waste, and tires.

Estimated solid waste generation for excavation and other construction activities is listed in Section B.4.98 (Removal of Facilities and Waste Disposal). Proposed Project Construction would generate waste largely in the form of soil, concrete from existing foundations, utility line cable, and scrap metal/wood from the replacement of existing towers. Approximately 75 percent of the excavated material would be clean and dry and would be "spread" along the ROW. Section D.10 (Public Health and Safety) discusses impacts in the event contaminated soil is encountered. The Proposed Project in the Coastal Link would include the removal of 43 (wood H-frame), 6 (wood pole), and 1 (steel pole) structures. As described in Section B.4.98 (Removal of Facilities and Waste Disposal), the conductor would be coiled and hauled off site to a recycling facility. Existing wood poles would be removed by cutting the pole at the ground level, leaving the embedded portion in place. The wood poles, insulators, cross arms and all other associated hardware would be disposed of at an offsite location. There would also be waste generated from roadway material during trenching for underground construction.

As identified in Tables D.14-4 and D.14-6, the project route is served by a variety of waste management agencies and landfills. Due to the number and capacity of landfills serving the project area, capacity for materials generated from construction of the Proposed Project would be available. Because the exact amount of material recycling is unknown, the total amount of waste requiring landfill disposal is unknown. Recycling activities would greatly reduce the quantity of construction-related materials transported to local landfills.

As the waste generated by the Proposed Project would occur over a 30-month period and be dispersed among the various landfills serving the entire project route, the daily waste exported off site would be a minute fraction of the maximum daily throughput for any of the landfills identified in Table D.14-6 and discussed above and the landfills have adequate remaining capacity. Therefore, construction waste generated by the Proposed Project would not substantially affect the remaining capacities of local landfills to serve local demands (Class III). Although impacts to solid waste facilities would not be significant (Class III) and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) and would be recommended for implementation within this link to ensure that maximum recycling activities would occur for the entire project.

Public Services. Construction Workers Demands. Construction of the Proposed Project would not result in a direct increase in the local population, leading to long-term demands to local public services (see also Section H, Growth-Inducing Effects, for a complete discussion of population impacts). As discussed under Impact S-3 for the Imperial Valley Link, the temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection or police protection in the long-term and it would not require the construction or expansion of facilities or services (Class III). The project would not preclude access to nor result in any socioeconomic impacts on the following schools, near which the Coastal Link route would pass in the City of San Diego: Thurgood Marshall Middle School, Dingeman Elementary School, Ellen Browning Scripps Elementary School, KinderCare Learning Center, and Sage Canyon Elementary School.

Fire Hazards. Section D.15 (Fire and Fuels Management) discusses how temporary construction activities would result in an increase in potential fire hazards and would increase temporary demands for fire protection services and it is not discussed here.

Emergency Services. Construction of the project and equipment would impede emergency access through the area. With implementation of APM PSU-APM-3, SDG&E would be required to coordinate construction schedules, lane closures, and other activities associated with installation of the Proposed Projection.

ect with emergency and police services to ensure minimal disruption to response times and access for these services. Impacts to emergency access are discussed under Section D.9 (Transportation and Traffic), which concludes that such impacts would be less than significant. Therefore, impacts to emergency access and/or public services and facilities would be less than significant (Class III) and no mitigation measure is required.

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

From an operational perspective, presence of the transmission line and associated facilities would not disrupt actual use of business properties or structures. Access to all businesses would be fully restored once construction of the project is complete. The transmission line would be located near business properties, but it would not remove any businesses along the route or cause any use to change. Therefore, no business-related impacts would occur and there would be no substantial change in revenues during operation (Impact S-1).

Increased demands on emergency services would occur if operation of the Proposed Project would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in greater detail in Section D.15 (Fire and Fuels Management) and is not addressed in this section. There is also the potential for a socioeconomic effect on local communities and other values at risk as a result of fire hazard, because a project-related fire or a fire that grows larger as a result of the presence of the project would have a significant effect on local communities. Cost of fire suppression is also discussed in Section D.15 (Fire and Fuels Management) and is not addressed here.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be obtained from SDG&E's Kearny O&M District and would be trucked to the individual structures; this facility is owned by SDG&E and ample water is available for insulator washing. Therefore, impacts on existing resources and suppliers would be less than significant given the minimal expected water usage during project construction and maintenance and SDG&E's overall supply at the facility (Class III).

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. SDG&E's property taxes would increase as a result of the Proposed Project. The State of California Board of Equalization (BOE) assesses infrastructure facilities annually. Dispersion of property tax revenue is determined at a local level based upon the location of the taxable property. Any increase in property tax revenue as a result of the Proposed Project would result in a beneficial impact to the local economy as a result of tax revenue spending.

The Proposed Project would not result in an adverse change in public resource revenue. Furthermore, the Proposed Project would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Proposed Project are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

As detailed under Impact S-5 under the Imperial Valley Link (see Section D.14.5.1), numerous studies conclude that any property value effects are usually smaller than anticipated and essentially impossible to generally quantify due to the individuality of properties/neighborhoods, differences in personal preferences of individual buyers/sellers, and the weight of other factors that contribute to a person's decision to purchase a property. Other factors (e.g., neighborhood factors, square footage, size of lot, irrigation potential) are much more likely than overhead transmission lines to be major determinants of the sales price of property (Kroll and Priestley, 1992). In addition, across the board, studies have generally concluded that over time any adverse property value impacts diminish and within five years the change is negligible.

As noted in Section D.14.2, all but 0.1 miles of the route within the Coastal Link would be within existing ROWs or underground in public roadways, which would eliminate visual impacts of the line. Incremental effects on property values that may result from the changes within the corridor resulting from this project would be very small and even more difficult to quantify. As a result, any changes in property values would not be a substantial decrease and this impact is considered to be adverse but less than significant (Class III). Although not required, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would help to reduce the visual impacts of the project, which is one of the components perceived to affect property values.

Due to the public nature of the federal and State lands traversed by the Proposed Project in the Coastal Link, this impact would not apply to those lands (Department of Defense and Caltrans). Finally, it should be noted that landowners of any private parcels that would be crossed by the Proposed Project would be compensated by SDG&E for use of its easement across the property based on the fair market value of the property taken.

Modifications to Sycamore Canyon Substation

The Sycamore Canyon Substation is located at MP 136.3 on the northeastern side of MCAS Miramar. Modifications required to accommodate the termination of three new 230 kV lines at the existing Sycamore Canyon Substation would occur within the existing already-disturbed substation footprint, which contains adequate vegetation buffer zones and on-site fire suppression equipment. Therefore, the potential for risk of fire would not substantially increase and would not result in a corresponding increased demand for fire or police protection. The new structures and equipment would be similar to the respective structures already in place at the substation.

Environmental Impacts and Mitigation Measures

As a result of the minor work within an 8-month period and its location within an existing SDG&E-owned facility, Impacts S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments), S-4 (Property tax revenues and/or fees from project

presence would substantially benefit public agencies), and S-5 (Presence of the project would decrease property values) would not occur.

Construction Impacts

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

Because project work would occur within the existing Sycamore Canyon Substation, there would be potential for service interruptions or utility facility damage in the event of an accident during the substation modifications. However, the Sycamore Canyon Substation is owned and operated by SDG&E and thus the crew is familiar with the facility and damage would not be caused to a third-party operator. Work is routinely performed within the substation and in the event that any accidental damage was to occur, operational employees are trained to respond and minimize/avoid any potential service interruptions by transferring load. Electrical systems are designed with redundant means to provide service. Therefore, because back-up means of preventing service interruptions in the event of an accident are in place at the substation, impacts to existing utilities would be less than significant (Class III) and no mitigation measure is required.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Construction at the substation would require two months of below grade construction and two months of above grade construction. Although removal and disposal of existing facilities would not be required, some solid waste would be generated during construction activities. This short-term work would also include water usage for dust suppression. The waste generated and water usage would be minor and short-term compared to other aspects of the Proposed Project and would be accommodated by existing water supply and landfill capacity in the area. Impacts would be less than significant (Class III) and no mitigation measure is required.

Modifications to Peñasquitos Substation

The Peñasquitos Substation is located at MP 149.9 on the northeast corner of the junction of I-5 and I-805. Modifications required to accommodate the termination of one new 230 kV line 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. All work would occur within the existing already-disturbed substation footprint, which contains adequate vegetation buffer zones and on-site fire suppression equipment. Therefore, the potential for risk of fire would not substantially increase and would not result in a corresponding increased demand for fire or police protection. The new structures and equipment would be similar to the respective structures already in place at the substation.

Environmental Impacts and Mitigation Measures

As a result of the minor work over an 8-month period and its location within an existing SDG&E-owned facility, Impacts S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments), S-4 (Property tax revenues and/or fees from project presence would substantially benefit public agencies), and S-5 (Presence of the project would decrease property values) would not occur.

Construction Impacts

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

Because project work would occur within the existing Peñasquitos Substation, there would be potential for service interruptions or utility facility damage in the event of an accident during the substation modifications. However, the Peñasquitos Substation is owned and operated by SDG&E and thus the crew is familiar with the facility and damage would not be caused to a third-party operator. Work is routinely performed within the substation and in the event that any accidental damage was to occur, operational employees are trained to respond and minimize/avoid any potential service interruptions by transferring load. Electrical systems are designed with redundant means to provide service. Therefore, because back-up means of preventing service interruptions in the event of an accident are in place at the substation, impacts to existing utilities would be less than significant (Class III) and no mitigation measure is required.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Construction at the substation would require two months of below grade construction and two months of above grade construction. Although removal and disposal of existing facilities would not be required, some solid waste would be generated during construction activities. This short-term work would also include water usage for dust suppression. The waste generated and water usage would be minor and short-term compared to other aspects of the Proposed Project and would be accommodated by existing water supply and landfill capacity in the area. Impacts would be less than significant (Class III) and no mitigation measure is required.

D.14.10 Other System Upgrades – Impacts and Mitigation Measures

Reconductor Sycamore Canyon to Elliot 69 kV Line

Reconductoring would occur over a 4.5-month period in an existing SDG&E corridor to an existing 69 kV line. Operational impacts would be minimally noticeable because the new components (insulators and conductors) would be similar (insulators) or identical (conductors) to the components that would be replaced. Therefore, Impacts S-4 (Property tax revenues and/or fees from project presence would substantially benefit public agencies) and S-5 (Presence of the project would decrease property values) would not occur.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III)

Although the Sycamore Canyon–Elliot 69 kV line reconductoring would be relatively minor work within an existing corridor, short-term construction activities would still have the potential to cause disturbance to businesses along the route over the 4.5-month period. Impacts on local businesses would result from

views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects. These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), and D.9 (Transportation and Traffic). Where Proposed Project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), and D.4 (Land Use) to mitigate potential impacts that would result in a substantial change to local business revenues.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

Reconductoring work and improvement of access roads and work pad area in this urban area has the potential to disrupt existing collocated utility lines as well as the existing energized Sycamore Canyon to Elliot 69 kV line as a result of potential accidents. Therefore, there would be potential for service interruptions of these utilities during construction of the Proposed Project.

All reconductoring and access road activity would occur within an existing transmission corridor that is owned and operated by SDG&E. In addition, under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the Proposed Project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §§4216-4216.9 (see Anza-Borrego Link for more detail) and APMs PSU-APM-1 and PSU-APM-2 would ensure that the potential impacts related to a collocation accident or utility disruption would be less than significant (Class III). No mitigation measure is required.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Water. Water would be supplied via truck from batch plants operating near or in the City of San Diego supplied by water from the City of San Diego Water District or other local municipal suppliers, depending on location. The water requirement of 60,000 total gallons over 4.5 months for ROW dust control (see Table B-4a in Section B) would represent a fraction of the overall public service requirements of the Proposed Project or existing City of San Diego Water District facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the Proposed Project, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Despite the relatively minor amount of work over a comparatively short period of time (4.5 months), the reconductoring would include the removal and replacement of 11 wood poles, which would need to be disposed of properly. As described in Section B.4.89 (Removal of Facilities and Waste Disposal), the conductor would be coiled and hauled off site to a recycling facility. Existing

wood poles would be removed by cutting the pole at the ground level, leaving the embedded portion in place. The wood poles, insulators, cross arms and all other associated hardware would be disposed of at an offsite location.

Estimated solid waste generation for excavation and other construction activities is listed in Section B.4.98 (Removal of Facilities and Waste Disposal). As identified in Tables D.14-4 and D.14-6, the project route is served by a variety of waste management agencies and landfills. The closest landfills include the Sycamore Sanitary Landfill (8514 Mast Boulevard) that allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards; the West Miramar Sanitary Landfill (5180 Convoy Street) that has a maximum permitted throughput of 8,000 tons/day and has a remaining capacity of 13,687,454 cubic yards; and the Otay Landfill (1700 Maxwell Rd) that has a maximum permitted throughput of 5,830 tons/day and has a remaining capacity of 33,070,879 cubic yards (CIWMB, 2007). The Sycamore Sanitary Landfill accepts asbestos, contaminated soil, mixed municipal waste, sludge (biosolids), agricultural, dead animals, tires, shreds, and wood waste (including treated wood). The West Miramar Sanitary Landfill accepts construction/demolition, mixed municipal waste, and tires. The Otay Landfill accepts wastes including: green materials, other designated waste, mixed municipal waste, construction/demolition, agricultural, sludge (biosolids), and tires.

Due to the number and capacity of landfills serving the project area, capacity for materials generated from reconductoring activities would be available. Because the exact amount of material recycling from the 11 wood poles is unknown, the total amount of waste requiring landfill disposal is unknown. Recycling activities would greatly reduce the quantity of construction-related materials transported to local landfills.

Since the waste generated by the reconductoring activities would occur over a 4.5-month period and be dispersed among the various landfills serving the entire project route, the daily waste exported off site would be a minute fraction of the maximum daily throughput for any of the landfills identified in Tables D.14-4 and D.14-6. Therefore, construction waste generated by the reconductoring of the Sycamore Canyon to Elliot 69 kV line would not substantially affect the remaining capacities of local landfills to serve local demands (Class III). Although impacts to solid waste facilities would not be significant (Class III) and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links and the reconductoring activities, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation during reconductoring activities to ensure that maximum recycling activities would occur for the entire project.

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Modifications to San Luis Rey Substation

Minor work would be done over an 8-month period to the San Luis Rey Substation in order to install an additional transformer that would be required to mitigate a single element contingency (N-1) overload that would occur after energizing the SRPL transmission lines. All work would occur within the existing already-disturbed substation footprint, which contains adequate vegetation buffer zones and on-site fire suppression equipment. Therefore, the potential for risk of fire would not substantially increase and would not result in a corresponding increased demand for fire or police protection. The new structures and equipment would be similar to the respective structures already in place at the substation.

Environmental Impacts and Mitigation Measures

As a result of the minor work and location within an existing SDG&E-owned facility, Impacts S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments), S-4 (Property tax revenues and/or fees from project presence would substantially benefit public agencies), and S-5 (Presence of the project would decrease property values) would not occur.

Construction Impacts

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

Because project work would occur within the existing San Luis Rey Substation, there would be potential for service interruptions or utility facility damage in the event of an accident during the substation modifications. However, the San Luis Rey Substation is owned and operated by SDG&E and thus the crew is familiar with the facility and damage would not be caused to a third-party operator. Work is routinely performed within the substation and in the event that any accidental damage was to occur, operational employees are trained to respond and minimize/avoid any potential service interruptions by transferring load. Electrical systems are designed with redundant means to provide service. Therefore, because back-up means of preventing service interruptions in the event of an accident are in place at the substation, impacts to existing utilities would be less than significant (Class III) and no mitigation measure is required.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Construction at the substation would require two months of below grade construction and two months of above grade construction. Although removal and disposal of existing facilities would not be required, some solid waste would be generated during construction activities. This short-term work would also include water usage for dust suppression. The waste generated and water usage would be minor and short-term compared to other aspects of the Proposed Project and would be accommodated by existing water supply and landfill capacity in the area. Impacts would be less than significant (Class III) and no mitigation measure is required. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the Proposed Project, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3b Use reclaimed water.

Modifications to South Bay Substation

In order to provide system voltage support, modifications would be performed at the existing South Bay Substation, including installation of a 69 kV, 50 Mega Volt Ampere Reactive (MVAR) shunt capacitor. All work would occur within the existing already-disturbed substation footprint, which contains adequate vegetation buffer zones and on-site fire suppression equipment. Therefore, the potential for risk

of fire would not substantially increase and would not result in a corresponding increased demand for fire or police protection. The new structures and equipment would be similar to the respective structures already in place at the substation.

Environmental Impacts and Mitigation Measures

As a result of the minor work over a 3.5-month period and its location within an existing SDG&E-owned facility, Impacts S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments), S-4 (Property tax revenues and/or fees from project presence would substantially benefit public agencies), and S-5 (Presence of the project would decrease property values) would not occur.

Construction Impacts

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

Because project work would occur within the existing South Bay Substation, there would be potential for service interruptions or utility facility damage in the event of an accident during the substation modifications. However, the South Bay Substation is owned and operated by SDG&E and thus the crew is familiar with the facility and damage would not be caused to a third-party operator. Work is routinely performed within the substation and in the event that any accidental damage was to occur, operational employees are trained to respond and minimize/avoid any potential service interruptions by transferring load. Electrical systems are designed with redundant means to provide service. Therefore, because back-up means of preventing service interruptions in the event of an accident are in place at the substation, impacts to existing utilities would be less than significant (Class III) and no mitigation measure is required.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Construction at the substation would require one month of below grade construction and one month of above grade construction over a 3.5-month period. Although removal and disposal of existing facilities would not be required, some solid waste would be generated during construction activities. This short-term work would also include water usage for dust suppression. The waste generated and water usage would be minor and short-term compared to other aspects of the Proposed Project and would be accommodated by existing water supply and landfill capacity in the area. Impacts would be less than significant (Class III) and no mitigation measure is required. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the Proposed Project, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3b Use reclaimed water.

D.14.11 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.

D.14.11.1 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 potential substation endpoints and five likely routes 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 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 identical to the Proposed Project described in Section D.14.2.

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 identical to the Proposed Project from these locations (see Section D.14.2). 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 grazing land is located within 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.

Jurisdictions along the route are identical to the Proposed Project from the Central East Substation to Sycamore Canyon Substation (see Central Link, Inland Valley Link, and Coastal Link information above). From the Sycamore Canyon Substation to the Mission Substation, the jurisdictions include DOD, County of San Diego, City of San Diego, SDG&E, and Caltrans. The demographics, housing, utilities and public services information for the City of San Diego and San Diego County is also found in Section D.14.2 for the Proposed Project. For either of the routes to Mission Substation, water would be likely be obtained primarily from the City of San Diego Water District. The district has a capacity of 324.2 mgd and supplies an average of 220.45 mgd (City of San Diego, 2007). This route would be located entirely within existing utility corridors and would parallel existing transmission lines.

Central East Substation to Los Coches Substation

The future 230 kV line would most likely follow the Proposed Project route from the Central East Substation to 1.0 mile south of the Creelman Substation (SRPL MP 122.2) in the Town of Ramona. Therefore, the environmental setting for the future 230 kV transmission line would be identical to the proposed SRPL project from these locations (see Section D.14.2). At MP 122.2 for the proposed route, the future expansion 230 kV line could diverge and turn south to follow the existing SDG&E 69 kV corridor 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. A variation of the route to Los Coches Substation would pass Creelman Substation, following SDG&E's existing 69 kV corridor north of San Diego Country Estates.

Jurisdictions along the route are identical to the proposed SRPL project from the Central East Substation to 1.0 mile south of the Creelman Substation in the Town of Ramona (see Central Link and Inland Valley Link information above). From the Creelman Substation to the Los Coches Substation, the jurisdictions include San Diego County, Barona Reservation, and the Community of Lakeside. Table D.14-10 identifies the housing and employment statistics for the Lakeside CDP in San Diego County.

Table D.14-10. Demographic Characteristics – 230 kV Future Transmission System Expansion: Central East Substation to Los Coches Substation

Location	2005 Estimated Population	2005 Estimated Housing Units	2005 Estimated Employment
San Diego County	2,824,259	1,113,207 Vacancy Rate: 6.5% (72,669 units)	Labor Force: 1,414,090 persons Construction Occupations: 120,693 persons Unemployed: 75,361 persons
Lakeside CDP (San Diego County)	19,560	7,047 Vacancy Rate: 2.8% (198 units)	Labor Force: 9,581 persons Construction Occupations: 1,364 persons Unemployed: 561 persons

^{*} Year 2000 Census data are presented, because 2005 American Community Survey (ACS) data are not available for this geographic location. Source: U.S. Census 2000: 2005 American Community Survey, http://factfinder.census.gov accessed June 15, 2007.

This route would be located entirely within existing utility corridors and would parallel existing transmission lines.

Central East Substation to Escondido Substation

Northern Route. From the proposed Central East Substation, the future 230 kV transmission line route would travel west 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 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 to Rincon Substation, which is just north of the Rincon Reservation at the 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, which is generally parallel to Highway S6, all the way to Escondido Substation. Jurisdictions along the route include the Vista Irrigation District, Caltrans, public utilities, U.S. Forest Ser-

vice, County of San Diego, Rincon Reservation, the Community of Valley Center, and the City of Escondido. Table D.14-11 identifies the year 2005 Census population, housing, and employment statistics for the Valley Center and Escondido, which are in San Diego County.

Table D.14-11. Demographic Characteristics – 230 kV Future Transmission System Expansion: Central East Substation to Escondido Substation

Location	2005 Estimated Population	2005 Estimated Housing Units	2005 Estimated Employment
San Diego County	2,824,259	1,113,207 Vacancy Rate: 6.5% (72,669 units)	Labor Force: 1,414,090 persons Construction Occupations: 120,693 persons Unemployed: 75,361 persons
Valley Center* (San Diego County)	7,323	2,517 Vacancy Rate: 4.1% (102 units)	Labor Force: 3,525 persons Construction Occupations: 383 persons Unemployed: 94 persons
City of Escondido (San Diego County)	133,017	45,779 Vacancy Rate: 4.8% (2,180 units)	Labor Force: 69,623 persons Construction Occupations: 7,285 persons Unemployed: 3,125 persons

^{*} Year 2000 Census data are presented, because 2005 American Community Survey (ACS) data are not available for this geographic location. Source: U.S. Census 2000: 2005 American Community Survey, http://factfinder.census.gov accessed June 15, 2007.

This route would be located almost entirely within existing utility corridors and parallel to existing 69 kV transmission lines.

Southern Route. This route would follow the "Central East Substation to Peñasquitos Substation" route described above, diverging from the proposed route at the Chicarita Substation (see the environmental setting in Section D.14). From the existing Chicarita Substation, the route would turn north along existing 230 kV and 69 kV transmission lines for approximately 6.2 miles, then it would jog west-northwest for one mile (following the existing lines), then follow the existing 69 kV line east and north along the west bank of Lake Hodges. It would continue north, in and out of the City of Escondido for another 7.2 miles to terminate at Escondido Substation. The environmental setting this segment as it approaches Escondido Substation is the same as for the Northern Route, above.

D.14.11.2 Environmental Impacts – 230 kV Future Transmission System Expansion

Impact conclusions for Future Expansion assume that mitigation measures would be implemented similar to those recommended for these impacts in the Proposed Project analysis. In addition, mitigation would be implemented that would be similar to the text of SRPL APMs (as indicated at the end of the measures), because it cannot be assumed that SDG&E would implement APMs similar to those that are included in the Sunrise Powerlink application.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class II for agricultural revenue, Class III for business revenue, Class IV for economic benefits)

Revenue from Business Operations. A wide range of land uses are near the Future Expansion routes, including commercial and industrial uses, urban areas, rural residences, agricultural and/or ranching

uses, public facilities and utilities, irrigation district land, Indian reservation lands (La Jolla and Rincon Reservations), Cleveland National Forest, military lands, and County open space land and preserve land. While business uses occur along the route, the project would not require the removal or relocation of any business uses because the routes would all be almost entirely within existing transmission corridors.

Impacts on local businesses would result from visual impacts, vehicular or pedestrian access impacts, land use impacts, noise, air emission, or health and safety concerns (such as EMF) along the existing corridors. These issues and potential impacts are analyzed extensively in this document in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety). Where impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated local business revenue impacts would not be significant. In addition, because most impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no specific mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Revenue from Agricultural Operations. Construction activities in the existing ROWs and new access roads would not preclude the permanent agricultural use of lands (see Section D.6 for a discussion of the agricultural lands through which the routes would pass), except at new tower locations. Steel poles would have a disturbance area of 64 square-foot and lattice towers would have a disturbance area of 79 square-foot. Construction of new 230 kV towers in these areas would require construction equipment to traverse the agricultural land. Specifically, this would involve the construction and/or expansion of access roads, the installation of tower structures and wires, and the presence/staging of construction equipment and vehicles. This would temporarily restrict grazing and crop production and/or would potentially damage crops if activities occurred during the growing season. The restriction of crop production or damage to crops would potentially decrease revenues for the agricultural landowners whose crops would be affected by project activities (Class II).

Impacts to agriculture would be significant; however, as described for Impact AG-1 in Section D.6.11.2, implementation of Mitigation Measures AG-1a, AG-1c, AG-1d, L-1d, L-1e, and L-1f would reduce impacts to be less than significant. These mitigation measures would reduce the effects of construction on agricultural businesses by avoiding placement of facilities (such as new access roads) in active agricultural areas, locating facilities along the edge of active agriculture wherever feasible, compensating farmers for project-related losses of crops or other pertinent agricultural resources, and notifying farmers of construction activities. With the implementation of these mitigation measures, impacts would be less than significant (Class II). The full text of the mitigation measures can be found in Appendix 12.

Economic Benefit. Alternatively, employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in San Diego County, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Mitigation Measures for Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments

- AG-1a Avoid interference with agricultural operations.
- **AG-1c** Coordinate with grazing operators.
- **AG-1d** Compensate farmers for lost crops along ROW. [APM LU-3]

- L-1d Provide advance notice and appoint public affairs officer. [APM LU-1]
- L-1e Notify property owners and provide access. [APM LU-4]
- L-1f Flag ROW boundary and environmentally sensitive areas. [APM LU-6]

Impacts S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Construction of the Future Expansion lines and related infrastructure has the potential to disrupt existing collocated utility lines, such as other electrical utility lines within the existing ROW or during underground construction, as a result of potential accidents. The Future Expansion lines would parallel and cross several transmission lines and pass adjacent to several utility facilities, all of which would have associated pipelines. Therefore, there would be potential for service interruptions of these utilities during construction of the Future Expansion project.

There would be potential for service interruptions of other utilities that may have to be underbuilt or relocated during construction of the Future Expansion lines to make room in the existing corridors. Installation of new towers and circuits would occur with the existing systems in service. Electrical systems are designed with redundant means to provide service. If it is necessary to take a particular circuit out of service, SDG&E would first ensure that a redundant feed is available.

Under Section 1, Chapter 3.1, "Protection of Underground Infrastructure," Article 2 of California Government Code §§4216-4216.9, SDG&E is required to contact a regional notification center at least two days prior to excavation of any subsurface installation. This action would cause Underground Service Alert to notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area. The location of all underground electric, water, gas, cable or telecommunications lines within the vicinity (at least 1,000 feet) of the future expansion lines would be marked.

Construction of tower foundations would not be within any roadways, thereby avoiding any utilities in roads. While a collocation accident would be significant, Mitigation Measure S-2c would require coordination with all utility providers with facilities located within or adjacent to the construction area to ensure that the project design would not conflict with these other utilities and notification of Underground Service Alert a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Because the Future Expansion Lines would all be overhead, there would be very little ground disturbance of heavily used underground utility corridors, such as roads. Therefore, with implementation of Mitigation Measure S-2c, any significant impacts related to a collocation accident or utility disruption would be less than significant (Class II).

Agricultural Lands. On off-road agricultural lands (see Section D.6), there is the potential to accidentally disrupt underground irrigation pipes during excavation or other ground disturbing construction activities (Class II). However, Mitigation Measure AG-1a (Avoid interference with agricultural operations) requires that SDG&E coordinate with property owners and tenants to ensure that project construction will be conducted so as to avoid interference with agricultural operations. Implementation of Mitigation Measure AG-1a would reduce impacts to Active Agricultural Operations and disruption to existing agricultural irrigation systems to less than significant levels.

Mitigation Measure for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

AG-1a Avoid interference with agricultural operations.

S-2c Coordinate with utility providers. [PSU-APM-1, PSU-APM-2]

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class II for emergency services, Class III)

Water. Water use would be similar to the 230 kV construction of the Proposed Project (see Table B-5) but could differ based on factors, such as construction technologies, road conditions, weather conditions, access road requirements, etc. at the time that construction of the future circuits would occur. Water use would vary depending on the implementation of air quality mitigation measures that may require the use of soil binders on unpaved roads, staging areas, and parking areas, which would substantially minimize water use. Non-potable water would be used for dust control when available. Comparatively small amounts of potable water would be needed for sanitary and drinking purposes. Water use during project construction would be a small fraction of the total water supply for jurisdictions affected by the Future Expansion and like the Proposed Project, it would not change the ability of the water suppliers identified previously to serve the project area demands (Class III).

SDG&E would have to contract with providers to obtain reclaimed water where it is available, and its use would reduce the amount of potable water needed from local water districts, especially in the area of the Inland Valley Link (see Section D.14.8) through which all future 230 kV routes except the northern Central East to Escondido Substation route would pass. In the event that water suppliers are not able to supply the full amount of water required during construction in the summer months, alternative means of procuring water and/or reducing water usage would be available as not to significantly impact water suppliers (Class III). For example, the use of soil binders (see Mitigation Measure AQ-1a) and reclaimed water would reduce water usage, and nearby districts have available water to serve the Proposed Project if necessary. No mitigation measure is required; however, implementation of Mitigation Measure S-3b (Use reclaimed water), would further reduce impacts on local and regional water supplies by encouraging use of reclaimed water where possible.

Solid Waste. The Future Expansion project construction would generate waste similar in quantity to the Proposed Project, largely in the form of soil, concrete from existing foundations, utility line cable, and scrap metal/wood from the replacement of existing towers (if needed to accommodate the new 230 kV line). Section B.4.98 (Removal of Facilities and Waste Disposal) describes the removal and disposal process. Waste management companies that serve San Diego County are discussed under Section D.14.2. The following landfills accommodate San Diego's waste disposal needs: Ramona Landfill, Borrego Springs Landfill, Otay Landfill, West Miramar Sanitary Landfill, Sycamore Sanitary Landfill, San Onofre Landfill, and Las Pulgas Landfill. The total amount landfilled per year is 1,987,886 tons. Poway contracts with EDCO for garbage and recyclables collection. The Sycamore Sanitary Landfill and Otay Landfill accommodate Poway's waste disposal needs. The total amount landfilled per year is 67,067 tons (SDG&E, 2006). As discussed under the Proposed Project, there is adequate capacity currently remaining at existing facilities.

The Future Expansion project routes are served by a variety of waste management agencies and landfills. Due to the number and capacity of landfills serving the project area, capacity for materials generated from construction of the Future Expansion would be available. Because the exact amount of material recycling is unknown, the total amount of waste requiring landfill disposal is unknown. Recycling activities would greatly reduce the quantity of construction-related materials transported to local landfills. As the waste generated by the Future Expansion would occur over an extended period and be dispersed among the various landfills serving the entire project route(s), the daily waste exported off site would be a minute fraction of the maximum daily throughput for any of the landfills. Therefore, construction waste generated by the Future Expansion would not substantially affect the remaining capacities of local landfills to serve local demands (Class III). Mitigation Measure S-3a (recycle construction waste) would minimize this impact further.

Public Services. Construction Workers Demands. Because of the large available labor pool in San Diego County and nearby areas, few construction workers are expected to temporarily relocate to the area. These workers likely live in the San Diego area and may already work for SDG&E. Therefore, they would not generate additional population that would exceed the capacity of local public service providers listed in Section D.14.2 for the Proposed Project. Construction of the 230 kV lines would not result in a direct increase in the local population, leading to long-term demands to local public services. Nor would the transmission line construction result in any long-term requirements that would place a permanent increased demand on emergency service providers that would result in new or expanded facilities. Therefore, the temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection or police protection in the long-term and it would not require the construction or expansion of facilities or services (Class III).

Fire Hazards. Section D.15 (Fire and Fuels Management) discusses how temporary construction activities would result in an increase in potential fire hazards and would increase temporary demands for fire protection services.

Emergency Services. Construction of the project and equipment would impede emergency access through the area. With implementation of Mitigation Measure S-3d, the applicant would be required to coordinate construction schedules, lane closures, and other activities associated with installation of the transmission lines with emergency and police services to ensure minimal disruption to response times and access for these services. Impacts to emergency access are discussed under Section D.9 (Transportation and Traffic), which concludes that such impacts would be less than significant. Therefore, any significant impacts to emergency access and/or public services and facilities would be reduced to be less than significant (Class II).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

- S-3a Recycle construction waste.
- S-3b Use reclaimed water.
- S-3d Coordinate construction schedule with emergency services. [PSU-APM-3]

Operational Impacts

Increased demands on emergency services would occur if operation of the lines would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in Section D.15 (Fire and Fuels Management) and is not addressed in this section.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing would periodically occur and would require water (SRPL has an estimated use of 300 gallons of water per structure). It is assumed that SDG&E would use a similar source of water as it does for the existing lines, and it would be trucked to the individual structures; however, the SDG&E Kearny O&M facility is owned by SDG&E and ample water is available for insulator washing. Therefore, impacts on existing resources and suppliers would be less than significant given the minimal expected water usage during project construction and operation given the overall supply (Class III). No mitigation would be required.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. SDG&E's property taxes are expected to increase as a result of the Future Expansion. The State of California Board of Equalization (BOE) assesses infrastructure facilities annually. Dispersion of property tax revenue is determined at a local level based upon the location of the taxable property. Any increase in property tax revenue as a result of the Future Expansion would result in a beneficial impact to the local economy as a result of tax revenue spending. Therefore, the Future Expansion would not result in an adverse change in public resource revenue. Furthermore, the project would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Potential changes to public agency revenues as a result of the Future Expansion are considered a beneficial (Class IV) impact.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the proposed SRPL project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, the discussion of Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities, such as transmission lines, in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects. It also provides a discussion on why this impact is considered to be less than significant (Class III). As such, the construction of the Future Expansion Lines would occur almost entirely within existing transmission corridors and any incremental impacts of a new line would be even smaller. No mitigation measure is required.

D.14.11.3 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.

Demographics and Housing

A portion of the potential future 500 kV line is currently proposed as the Lake Elsinore Advanced Pumped Storage (LEAPS) Project, which is analyzed as an alternative to the Sunrise Powerlink Project (see Section E.7). Therefore, the socioeconomic setting would identical to the Proposed Project near the Central East Substation (see Section D.14.2), the 230 kV northern route to Escondido Substation along

its east-west segment (see Section D.14.11.1), and for its remainder, the route would be similar to the LEAPS Alternative, which is discussed in Section E.7.14. Table D.14-12 identifies the year 2006 Census population and housing and employment statistics for the jurisdictions potentially affected by this link of the project route.

Table D.14-12. Demographic Characteristics – 500 kV Future Transmission System Expansion					
Location	2006 Estimated Population	2006 Estimated Housing Units	2006 Estimated Employment		
San Diego County	2,813,833	1,125,820 Vacancy Rate: 7.7% (86,201 units)	Labor Force: 1,503,106 persons Construction Occupations: 139,444 persons Unemployed: 71,568 persons		
Riverside County	2,026,803	732,433 Vacancy Rate: 12.2% (89,194 units)	Labor Force: 955,443 persons Construction Occupations: 120,710 persons Unemployed: 70,718 persons		
Orange County	3,002,048	1,023,053 Vacancy Rate: 5.1% (51,845 units)	Labor Force: 1,540,079 persons Construction Occupations: 114,848 persons Unemployed: 72,165 persons		
Valley Center* (San Diego County)	7,323	2,517 Vacancy Rate: 4.1% (102 units)	Labor Force: 3,525 persons Construction Occupations: 383 persons Unemployed: 94 persons		
Rainbow CDP* (San Diego County)	2,026	759 Vacancy Rate: 5.3% (41 units)	Labor Force: 797 persons Construction Occupations: 105 persons Unemployed: 17 persons		
Lakeland Village CDP* (Riverside County)	5,626	2,185 Vacancy Rate: 10.0% (219 units)	Labor Force: 2,342 persons Construction Occupations: 376 persons Unemployed: 272 persons		
Lake Elsinore* (Riverside County)	28,928	9,505 Vacancy Rate: 7.2% (688 units)	Labor Force: 12,268 persons Construction Occupations: 1,698 persons Unemployed: 866 persons		

^{*} Year 2000 Census data are presented, because 2006 American Community Survey (ACS) data are not available for this geographic location. Source: U.S. Census 2000: 2006 American Community Survey, http://factfinder.census.gov accessed October 17, 2007.

Public Services and Utilities

The socioeconomic setting would be identical to the Proposed Project near the Central East Substation (see Section D.14.2), the 230 kV future northern route to Escondido Substation along its east-west segment (see Section D.14.11.1), and the remainder would be similar to the LEAPS Alternative, which is discussed in Section E.7.14.

In San Diego County, the San Diego County Water Authority (SDCWA) provides up to 97 percent of the water used in the county, importing from a single supplier, the Metropolitan Water District (MWD) of Southern California. MWD would also likely supply the water in Riverside County. Most of this water is obtained from the Colorado River and northern California through a massive system of pipes and aqueducts. The line would also pass just west of Lake Elsinore, where the LEAPS Project Alternative generation facilities would include Lake Elsinore lower reservoir, Decker Canyon upper reservoir, Santa Rosa Powerhouse, and water conduits including power shafts, power tunnel, penstocks, and tailrace tunnels.

The potential future 500 kV circuit would parallel the following existing lines from Central East Substation to the LEAPS Project 500 kV transmission line route entirely within existing transmission line ROWs:

• Narrows-Warners 69 kV transmission line

- Warners-Rincon 69 kV transmission line
- Rincon-Lilac 69 kV transmission line
- Talega-Escondido 230 kV transmission line

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 northern end of the 500 kV line would interconnect with SCE's 500 kV transmission system at a new switching station north of Interstate 15, about 20 miles west of SCE's Valley Substation.

D.14.11.4 Environmental Impacts – 500 kV Future Transmission System Expansion

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class I for direct loss of business, Class II for revenue, Class IV for economic benefits)

Revenue from Business Operations. A wide range of land uses are near the Future Expansion 500 kV route, including commercial and industrial uses, urban areas, rural residences, agricultural and/or ranching uses, public facilities and utilities, irrigation district land, Indian reservation lands (La Jolla, Rincon, San Pasqual, and Pechanga Reservations), Cleveland National Forest, military lands (Camp Pendleton Marine Corps Base), and County open space land and preserve land. There is potential for some residential and/or business displacement due to the transmission line, and the co-applicants propose to purchase certain properties to help offset this effect. Properties may need to be acquired, especially if the LEAPS Alternative corridor is utilized (otherwise it would follow an existing 69 kV corridor), but specific properties have not yet been identified. These unknown effects that could result in a total loss of businesses and revenues are conservatively estimated to be significant and unmitigable (Class I).

Loss of revenue to other local businesses not directly affected potentially would result from degradation of views, presence of construction equipment and activity, vehicular or pedestrian access restrictions, land use and noise effects, or health and safety concerns (such as EMF). These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Traffic/Transportation), and D.10 (Public Health and Safety) and include associated mitigation measures. Coupled with implementation of the Forest Service 4(e) Conditions 37 for areas of the route that would be on CNF lands, impacts to business revenues would be reduced to a less than significant level (Class II).

Revenue from Agricultural Operations. Construction activities in the existing ROWs and new access roads would not preclude the permanent agricultural use of lands (see Section D.6 for a discussion of the agricultural lands through which the routes would pass), except at new tower locations. Steel poles would have a disturbance area of 64 square-foot and lattice towers would have a disturbance area of 79 square-foot. Construction of new 500 kV towers in these areas would require construction equipment to traverse the agricultural land. Specifically, this would involve the construction and/or expansion of access roads, the installation of tower structures and wires, and the presence/staging of construction equipment and vehicles. This would temporarily restrict grazing and/or crop production and/or would potentially damage crops if activities occurred during the growing season. The restriction of crop production or damage to crops would potentially decrease revenues for the agricultural landowners whose crops would be affected by project activities (Class II).

Impacts to agricultural resources would be significant; however, as described for Impact AG-1 in Section D.6.11.2, implementation of Mitigation Measures AG-1a, AG-1c, AG-1d, L-1d, L-1e, and L-1f would reduce impacts to be less than significant. These mitigation measures would reduce the effects of construction on agricultural businesses by avoiding placement of facilities (such as new access roads) in active agricultural areas, locating facilities along the edge of active agriculture wherever feasible, compensating farmers for project-related losses of crops or other pertinent agricultural resources, and notifying farmers of construction activities. With the implementation of these mitigation measures, impacts would be less than significant. The full text of the mitigation measures can be found in Appendix 12.

Economic Benefit. Alternatively, employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in San Diego and western Riverside Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Mitigation Measures for Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments

- USFS-37 Condition No. 37 Scenery Conservation Plan. (Full text presented in Appendix 12)
- AG-1a Avoid interference with agricultural operations.
- **AG-1c** Coordinate with grazing operators.
- AG-1d Compensate farmers for lost crops along ROW. [APM LU-1]
- L-1d Provide advance notice and appoint public affairs officer. [APM LU-3]
- L-1e Notify property owners and provide access. [APM LU-4]
- L-1f Flag ROW boundary and environmentally sensitive areas. [APM LU-6]

Impacts S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Construction of the Future Expansion lines and related infrastructure has the potential to disrupt existing collocated utility lines, such as other electrical utility lines within the existing ROW or during connection with SCE's existing Serrano-Valley 500 kV line in Riverside County, as a result of potential accidents. The Future Expansion lines would parallel and cross several transmission lines and pass adjacent to several utility facilities and substations. Therefore, there would be potential for service interruptions of these utilities during construction of the Future Expansion project.

There would be potential for service interruptions of other utilities that may have to be underbuilt or relocated during construction of the Future Expansion lines to make room in the existing 69 kV corridors for a 500 kV line. Installation of new towers and circuits would occur with the existing systems in service. Electrical systems are designed with redundant means to provide service. If it is necessary to take a particular circuit out of service, SDG&E would first ensure that a redundant feed is available in its overall transmission system.

Under Section 1, Chapter 3.1, "Protection of Underground Infrastructure," Article 2 of California Government Code §§4216-4216.9, SDG&E is required to contact a regional notification center at least two days prior to excavation of any subsurface installation. This action would cause Underground Service Alert to notify the utilities that may have buried lines within 1,000 feet of the project. Representatives

of the utilities are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area. The location of all underground electric, water, gas, cable or telecommunications lines within the vicinity (at least 1,000 feet) of the future expansion lines would be marked.

Construction of tower foundations would not be within any roadways, thereby avoiding any utilities in roads. While a collocation accident would be significant, Mitigation Measure S-2c would require coordination with all utility providers with facilities located within or adjacent to the construction area to ensure that the project design would not conflict with these other utilities and notification of Underground Service Alert a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Because the Future Expansion Lines would all be overhead, there would be very little ground disturbance of heavily used underground utility corridors, such as roads. Therefore, with implementation of Mitigation Measures S-2a, S-2b, and S-2c, any significant impacts related to a collocation accident or utility disruption would be less than significant (Class II).

Agricultural Lands. On off-road agricultural lands (see Section D.6) there is the potential to accidentally disrupt underground irrigation pipes during excavation or other ground disturbing construction activities (Class II). However, under Mitigation Measure AG-1a (Avoid interference with agricultural operations), SDG&E must coordinate with property owners and tenants to ensure that project construction will be conducted so as to avoid interference with agricultural operations. Implementation of Mitigation Measure AG-1a would reduce impacts to Active Agricultural Operations and disruption to existing agricultural irrigation systems to less than significant levels.

Mitigation Measure for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

- AG-1a Avoid interference with agricultural operations.
- S-2a Notify public of utility service interruption.
- S-2b Protect underground utilities.
- S-2c Coordinate with utility providers. [PSU-APM-1, PSU-APM-2]

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class II for emergency services, Class III)

Water. Water use would be similar to the 500 kV construction of the Proposed Project (see Table B-5) but could differ based on factors, such as construction technologies, road conditions, weather conditions, access road requirements, etc. at the time that construction of the future circuits would occur. Among other factors, use would vary depending on the implementation of air quality mitigation measures that may require the use of soil binders on unpaved roads, staging areas, and parking areas, which would substantially minimize water use. Non-potable water would be used for dust control when available. Comparatively small amounts of potable water would be needed for sanitary and drinking purposes. Water use during project construction would be a small fraction of the total water supply of MWD (similar to the proposed route and LEAPS Alternative) and like the proposed route it would not change the ability of the water suppliers identified previously to serve the project area demands (Class III). SDG&E would have to contract with providers to obtain reclaimed water where it is available, and its use would reduce the amount of potable water needed from local water districts. In the event that water suppliers are not able to supply the full amount of water required during construction in the summer months, alternative means of procuring water and/or reducing water usage would be available (Class III). For example, the use of soil binders (see Mitigation Measure AQ-1a) and

reclaimed water would reduce water usage, and nearby districts within San Diego, Riverside, and Orange Counties have available water to serve the Proposed Project if necessary. No mitigation measure is required; however, implementation of Mitigation Measure S-3b (Use reclaimed water), would further reduce impacts on local and regional water supplies by encouraging use of reclaimed water where possible.

Solid Waste. The Future Expansion project construction would generate waste similar in quantity to the Proposed Project, largely in the form of soil, concrete from existing foundations (if any removal is necessary), utility line cable, and scrap metal/wood from the replacement of existing towers (if needed to accommodate the new 500 kV line). Section B.4.89 (Removal of Facilities and Waste Disposal) describes the removal and disposal process. Waste management companies that serve San Diego County are discussed under Section D.14.2 and companies that serve Riverside County are discussed in Section E.7.14. As discussed under the Proposed Project and LEAPS Project Alternative, there is adequate capacity currently remaining at existing facilities.

The Future Expansion project routes would be served by a variety of waste management agencies and landfills. Due to the number and capacity of landfills serving the project area, capacity for materials generated from construction of the Future Expansion would likely be available. Because the exact amount of material recycling is unknown, the total amount of waste requiring landfill disposal is unknown. Recycling activities would greatly reduce the quantity of construction-related materials transported to local landfills. As the waste generated by the Future Expansion would occur over an extended period and be dispersed among the various landfills serving the entire project route, the daily waste exported off site would be a minute fraction of the maximum daily throughput for any of the landfills. Therefore, construction waste generated by the Future Expansion would not substantially affect the remaining capacities of local landfills to serve local demands (Class III). Mitigation Measure S-3a (recycle construction waste) would minimize this impact further.

Public Services. Construction Workers Demands. Because of the large available labor pool in San Diego County and nearby areas, few construction workers are expected to temporarily relocate to the area. These workers likely live in the San Diego and southwestern Riverside County area and may already work for SDG&E. Therefore, they would not generate additional population that would exceed the capacity of local public service providers listed in Section D.14.2 for the Proposed Project and E.7.14 for the LEAPS Project Alternative. Construction of the 500 kV line would not result in a direct increase in the local population, leading to long-term demands to local public services. Nor would the transmission line construction result in any long-term requirements that would place a permanent increased demand on emergency service providers that would result in new or expanded facilities. Therefore, the temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection or police protection in the long-term and it would not require the construction or expansion of facilities or services (Class III).

Fire Hazards. Section D.15 (Fire and Fuels Management) discusses how temporary construction activities would result in an increase in potential fire hazards and would increase temporary demands for fire protection services.

Emergency Services. Construction of the project and equipment would impede emergency access through the area. With implementation of Mitigation Measure S-3d, the applicant would be required to coordinate construction schedules, lane closures, and other activities associated with installation of the transmission lines with emergency and police services to ensure minimal disruption to response times and access for these services. Impacts to emergency access are discussed under Section D.9 (Transportation

and Traffic), which concludes that such impacts would be less than significant. Therefore, any significant impacts to emergency access and/or public services and facilities would be reduced to be less than significant (Class II).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

S-3d Coordinate construction schedule with emergency services. [PSU-APM-3]

Operational Impacts

Increased demands on emergency services would occur if operation of the lines would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in Section D.15 (Fire and Fuels Management) and is not addressed in this section.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing would periodically occur and would require water (SRPL has an estimated use of 300 gallons of water per structure). It is assumed that SDG&E would use the same source of water as it does for existing lines located in the same corridors (from the existing SDG&E Kearney O&M facility), and it would be trucked to the individual structures. This facility is owned by SDG&E and ample water is available for insulator washing. Therefore, impacts on existing resources and suppliers would be less than significant given the minimal water use expected (Class III). No mitigation would be required.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. SDG&E's property taxes are expected to increase as a result of the Future Expansion. The State of California Board of Equalization (BOE) assesses infrastructure facilities annually. Dispersion of property tax revenue is determined at a local level based upon the location of the taxable property. Any increase in property tax revenue as a result of the Future Expansion would result in a beneficial impact to the local economy as a result of tax revenue spending. CNF would receive no tax revenue from the installation of the 500 kV line on National Forest lands, because local tax revenues do not accrue on federal lands. However, CNF does collect fees annually for ROW Grants. An annual land use rent is determined from a Linear ROW Fee Schedule (inflation adjusted). The CY 2007 fee for an electric line ROW in San Diego County is \$43.81 per acre of ROW per year (CNF, 2007a). Linear ROW fees go direct to the U.S. Treasury's General Fund. Therefore, the Future Expansion would not result in an adverse change in public resource revenue. Furthermore, the project would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Potential changes to public agency revenues as a result of the Future Expansion are considered a beneficial (Class IV) impact.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the proposed SRPL project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, the discussion of Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in

detail the issues associated with the potential for impacts on property values and industrial facilities, such as transmission lines, in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects. It also provides a discussion on why this impact is considered to be less than significant (Class III). As such, the construction of the southern half of the 500 kV Future Expansion Line (to where it would join the LEAP Project corridor) would occur entirely within existing transmission corridors and the incremental impacts of a new line on property values would be even smaller. No mitigation measure is required.

D.14.12 Connected Actions and Indirect Effects

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 three-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 three-first two-ose projects are addressed in Sections D.14.12.1 through-and-D.14.12.24. transmission-system upgrades, but this is no longer considered to be a connected action, based on comments from IID. Therefore, this analysis has been deleted and is struck out in this section.

The Jacumba Substation, originally addressed in Section D.14.12.4, was modified and expanded in Section 2 of the Recirculated Draft EIR/Supplemental Draft EIS, superseding the original analysis. Therefore, the original analysis from the Draft EIR/EIS has been deleted and is struck out in this section. The replacement analysis in the Recirculated Draft EIR/Supplemental Draft EIS includes consideration of the larger, relocated Jacumba Substation as well as other transmission and substation components that would be required to interconnect the Sempra Rumorosa Wind Energy Project (RWEP) to the SDG&E transmission system.

• Indirect Effects. One project, the SCE La Rumorosa Wind Project, (addressed in Section D.14.12.5), was analyzed in the Draft EIR/EIS. This analysis was modified and expanded in Section 2 of the Recirculated Draft EIR/Supplemental Draft EIS, superseding the analysis presented in the Draft EIR/EIS. Therefore, the original analysis from the Draft EIR/EIS has been deleted and is struck out in this section. would create indirect effects as a result of the construction and operation of the Sunrise Powerlink Project.

D.14.12.1 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). Types of mitigation that would likely reduce potentially significant impacts of the Stirling CSP facility and transmission line have been included in the environmental impact analysis below; however, implementation of specific mitigation measures would be developed and executed by Stirling Energy Systems at the time of project permitting and approval.

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

Refer to Section D.14.2 (Environmental Setting for the Proposed Project) for a discussion of socio-economics, public services, and utilities in Imperial County and the surrounding project area.

Construction would begin in mid-2009 at the earliest (approximately 12 to 15 months after filing its application with the CEC), and would take place over a period of 5 to 6 years. SES estimates that the project would create between 400 and 500 construction and related jobs at the peak of construction, for between 6 and 12 months. For the balance of the construction period, between 300 and 400 workers would be required. These jobs would be filled from the local population and the surrounding metropolitan areas. SES estimates that a secondary job creation benefit of about 200 jobs would also be realized in the local community retail centers due to increased purchasing power of project employees.

The transmission line would parallel the SWPL ROW for approximately eight miles to the Imperial Valley Substation. For the final four miles into Imperial Valley Substation, the new line would also parallel the proposed SRPL route in the event that the Interstate 8 Alternative is selected.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class IV)

There are no businesses along the transmission line route or at the project site. Plaster City Drywall Facility, an existing industrial facility that would not likely be affected by additional construction activities, is located in Plaster City, at the SES site's northern boundary along the railroad ROW. This is an existing industrial facility that would not likely be affected by additional the construction activities. There would be no impact to revenues related to business operations. However, employment of construction personnel for five to six years would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. SES estimates that a secondary job creation benefit of about 200 jobs would also be realized in the local community retail centers. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV). No mitigation would be required.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

Construction of tower foundations and solar dishes would not be within any roadways, thereby avoiding any utilities in roads. The project is located in open space on undeveloped BLM land. The SES Solar Two, LLC Project would traverse or be adjacent to only 0.25 miles of forage cropland between MP 2 and 3, so it would not likely disrupt any underground irrigation pipes. However, the transmission line would parallel the SWPL #1 500 kV corridor for its entire length. SWPL #1 would bisect the Stirling solar dish site. In the event that the Interstate 8 Alternative is selected to be the SRPL route, then it would also parallel SRPL for 4 miles. In addition, the general boundaries of the Stirling site include I-8 to the south and the Union Pacific Railroad to the north, both of which could have buried utilities along their ROWs. Plaster City Drywall facility, located at the northern end of the site, and although the site would not be directly affected, it could have associated utilities and the project would include extensive ground disturbance.

As a result, there is the potential for an existing utility disruption in the event of an accident. Under Section 1, Chapter 3.1, "Protection of Underground Infrastructure," Article 2 of California Government Code §§4216-4216.9, SES would be required to contact a regional notification center at least two days prior to excavation of any subsurface installation. This action would cause Underground Service Alert to notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area. The location of all underground electric, water, gas, cable or telecommunications lines within the vicinity of the line and site would be marked. Notification and marking the locations of existing utilities would allow construction activities to avoid existing lines and would thereby minimize the potential for a co-location accident and impacts would be less than significant (Class III). No mitigation would be required; however, implementation of the measure below would be recommended to further reduce this impact. Please see the explanation of mitigation for less than significant impacts in Section D.1.5.1. The full text of the mitigation measures can be found in Appendix 12.

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a co-location accident

S-2c Coordinate with utility providers. [PSU-APM-1, PSU-APM-2]

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Water. Water would be required during project construction for dust abatement and cleaning construction equipment. The amount of water required depends on the length of access roads used, weather conditions, road surface conditions, and other site-specific conditions. Access roads for SRPL and SWPL would likely be used for the transmission line, although new spur roads to the individual towers may be needed because the span for a 230 kV line is at least 400 feet shorter than for a 500 kV line. Dust suppression efforts would occur on each day that grading activities take place and when construction vehicles use unpaved access roads.

Water consumption for this purpose would also vary depending on the implementation of typical air quality mitigation measures that would require implementation of a Fugitive Dust Control Plan (see Section D.11, Air Quality) that may specify the use of soil binders on unpaved roads, staging areas, and parking areas, which would substantially minimize water use. Water would also be needed to make the concrete used during project construction and is often used to lubricate the auger during boring operations. Comparatively small amounts of potable water would be needed for sanitary and drinking pur-

poses. SES would receive its water from IID's non-agricultural water supply and in addition to the fact that IID has adequate supply, for this contract to occur IID would likely determine that it would not affect its ability to serve customer demands. The 82-mile All American Canal delivers approximately 2.321 billion gallons per day of Colorado River water to Imperial County. Therefore, the water demand for construction of the solar plant and transmission line would not be a significant impact (Class III) on the regional water supply. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the SES project, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Dish construction would generate waste largely in the form of soil from earthwork and transmission line construction would generate waste largely in the form of soil from tower foundation excavations. Some percentage of excavate would be clean and dry and would be "spread" along the ROW and/or solar site. No existing structures would be removed. The closest landfills to the substation site and transmission corridor would be the:

- Allied Imperial Landfill (104 East Robinson Road) that allows a maximum permitted throughput of 1,135 tons/day and has a remaining capacity of 2,105,500 cubic yards;
- Imperial Solid Waste Site (1705 West Worthington Road) that allows a maximum permitted throughput of 207 tons/day and has a remaining capacity of 183,871 cubic yards; and
- Calexico Solid Waste Site (New River and Highway 98) that allows a maximum permitted throughput of 150 tons/day and has a remaining capacity of 1,530,950 cubic yards (CIWMB, 2007).

Due to the number and capacity of landfills serving the project area, capacity for materials generated from construction of the SES project would be available. As the waste generated during construction would occur over an extended five- to six-year period, the daily waste exported off site would be a fraction of the maximum daily throughput for any of the landfills above. Therefore, construction waste generated by the SES project would not substantially affect the remaining capacities of local landfills to serve local demands (Class III).

Public Services. Construction Workers Demands. Because of the large available labor pool in San Diego and Imperial Counties and nearby areas, few construction workers are expected to temporarily relocate to the area (see Impact S-1CA). Therefore, they would not generate additional population that would exceed the capacity of local public service providers listed in Table D.14-2 for the Proposed Project. Nor would the SES project result in any long-term requirements that would place a permanent increased demand on emergency service providers that would result in new or expanded facilities. Therefore, the temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection or police protection in the long-term and it would not require the construction or expansion of facilities or services (Class III).

Fire Hazards. Section D.15 (Fire and Fuels Management) discusses how temporary construction activities would increase potential fire hazards and temporary demands for fire protection services.

Emergency Services. Project construction and associated equipment would potentially block roadways and impede emergency access through the area, which would result in a potentially significant impact (Class II). Implementation of mitigation measures that would require IID to coordinate construction schedules, lane closures, and other activities associated with installation of the solar plant and transmission line with emergency and police services would ensure minimal disruption to response times and access for these services. Impacts to emergency access are discussed under Section D.9 (Transportation and Traffic),

and would be reduced to less than significant levels. Therefore, impacts to emergency access and/or public services and facilities would be less than significant as well with the incorporation of Mitigation Measure S-3d.

Mitigation Measures for Impact S-3: Project construction and operation would increase the need for public services and facilities

AQ-1a Implement Fugitive Dust Control Plan.

S-3b Use reclaimed water.

S-3d Coordinate construction schedule with emergency services. [PSU-APM-3]

Impact S-1CA: Labor force requirements would create a substantial demand for labor or a change in local employment (Class IV)

Based on Table D.14-1, construction of the site would employ 9 to 11 percent of Imperial County's construction labor force during peak construction and 7 to 9 percent during off-peak construction. Construction of the 230 kV transmission line would be largely similar to the process described in Section B.4.1 for the proposed SRPL 230 kV line and may require additional workers. Although the project would be located in an area with a low population, large local construction workforces are generally available in the region because of larger population centers in San Diego County and the El Centro area in Imperial County. Local highways provide good access to the alignment from throughout the region and project site is located adjacent to Interstate 8. It is approximately 115 miles (less than a 2-hour drive) between downtown San Diego and El Centro. Therefore, although the project would take place over a five- to six-year period, most workers are not expected to relocate to the area permanently for construction. After construction, few workers are required for operation and maintenance (including periodic washing) of the solar dishes. The project would not adversely impact the local labor force and because the workers would primarily be drawn from local populations, any change in the labor force would benefit local employment (Class IV). No mitigation would be required.

Impact S-2CA: Construction workers would require housing that exceeds the supply of local housing or temporary housing facilities (Class III)

SES estimates that the project would create between 400 and 500 construction and related jobs at the peak of construction, for approximately 6 to 12 months. For the balance of the construction period, between 300 and 400 workers would be required. Remote areas of Imperial and San Diego Counties near the Stirling site would lose access to temporary housing due to the influx of construction labor, if housing is required during construction, but this project would be located near the El Centro population center. Most workers would likely stay in the El Centro area, which has a population of 37,835 persons and Imperial County has 4,504 vacant housing units (U.S. Census, 2000). Since workers would be drawn primarily from the local and surrounding population, it is not anticipated that project construction would create a burden on temporary housing resources, schools and hospitals, or public services and utilities (Class III).

Operational Impacts

Increased demands on emergency services would occur if operation of the solar plant would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in greater detail in Section D.15 (Fire and Fuels Management) and is not addressed in this section.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, periodic washing of the mirrored surfaces of the dishes would be required and would consume approximately 30 acre-foot of water per year. Transmission line maintenance would be similar to that of the Proposed Project. SES has negotiated with IID to purchase its water and the project would tap into a nearby canal. Water consumption would use approximately 3 percent of IID's non-agricultural water and on top of the comparatively small amount of water required, in order for this contract to occur IID would likely determine that it would not effect its ability to serve customer demands. Therefore, the water demand for construction of the solar site and transmission line would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is required.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates levied within the affected jurisdictions. SDG&E's property taxes would increase as a result of the Proposed Project. The State of California Board of Equalization (BOE) assesses infrastructure facilities annually. Dispersion of property tax revenue is determined based upon the location of the taxable property. Any increase in property tax revenue as a result of the Stirling Project would be a beneficial impact to the local economy.

The BLM would receive no tax revenue from the installation of the solar dishes on BLM lands, because local tax revenues do not accrue on federal lands. However, BLM does collect fees annually for ROW Grants. For 2007 (rates are adjusted annually) BLM would receive \$14.60 per acre for a ROW in Imperial County and \$43.81 per acre in San Diego County (BLM, 2007). The money would go into the federal general fund and would not directly benefit the BLM El Centro office.

The project would not result in an adverse change in public resource revenue. Furthermore, it would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the SES Project are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are required.

Impact S-5: Presence of the project would decrease property values (Class III)

The project would be primarily on undeveloped open space BLM land. It would be bounded by existing linear transportation features of the Union Pacific Railroad ROW and I-8; however, it would be located adjacent to a planned subdivision development east of Dunaway Road. As detailed under Impact S-5 under the Imperial Valley Link (see Section D.14.5.1), numerous studies conclude that any property value effects are usually smaller than anticipated and essentially impossible to generally quantify due to the individuality of properties/neighborhoods, differences in personal preferences of individual buyers/sellers, and the weight of other factors that contribute to a person's decision to purchase a property. Other factors (e.g., neighborhood factors, square footage, size of lot, irrigation potential) are much more likely than overhead transmission lines to be major determinants of the sales price of property (Kroll and Priestley, 1992). In addition, across the board, studies have generally concluded that over time any adverse property value impacts diminish and within five years the change is negligible. As a result, any changes in property values would not be a substantial decrease and this impact is considered to be less than significant (Class III). Although not required, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints,

would help to reduce the visual impacts of the project, which is one of the components perceived to affect property values (see Section D.14.5.1 for the full impact discussion).

D.14.12.2 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 would potentially 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). Mitigation that would likely reduce potentially significant impacts of the IID Transmission System Upgrades has been included in the environmental impact analysis below; however, implementation of specific mitigation measures would be developed and executed by IID at the time of project permitting and approval.

Approval of the SRPL would not result in automatic approval of the IID Transmission System Upgrades discussed below, and 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

Refer to Section D.14.2 (Environmental Setting for the Proposed Project) for a discussion of socioeconomics, public services, and utilities in Imperial County, nearby ABDSP, and the surrounding area around the San Felipe 500/230 kV Substation and IID's Bannister San Felipe 230 kV line, which would be adjacent to the proposed SRPL. Water would most likely be supplied by IID, the project's proponent. At the time of construction, the IID Bannister San Felipe 230 kV line and new San Felipe 500/230 kV Substation would parallel, cross, or be adjacent to the following existing utilities:

- Bannister Substation (MP IID 0)
- SDG&E Sunrise Powerlink Imperial Valley-Central East 500 kV transmission line (MP IID-0 to MP IID-26.3)
- IID 161 kV transmission line (MP IID 0 to MP IID 6)
- IID 92 kV transmission lines (MP IID 15.2 to MP IID 18 and MP IID 22 to MP IID 26.3)
- IID Anza 92 kV Substation (MP IID 15.2 where the route turns south from SR78)
- IID San Felipe 92 kV Substation (MP IID 26.3).

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III for revenue, Class IV for economic benefits)

Revenue from Business Operations. Business uses occur near the IID route and substation, especially in the area of the route along SR78 east of and outside of the Park, but the project would not require the removal or relocation of any business uses. Impacts on local businesses would result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Transportation and Traffic), and D.10 (Public Health and Safety), and D.11 (Air Quality). Where impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a co-location accident (Class III)

The new San Felipe Substation would be located adjacent to the existing San Felipe Substation in a sparsely developed area with scattered rural residences around the substation vicinity. Construction of new access roads would be minimal, because Old Kane Springs Road and existing access roads to the existing substation would likely be used (although new spur roads to the individual towers may be needed because the span for a 230 kV line is at least 400 feet shorter than for a 500 kV line). However, during grading and below grade substation construction there is the potential to encounter and accidentally disrupt existing underground utilities in the area of the rural San Felipe community.

Construction of tower foundations for the overhead 230 kV line would not be within any roadways, thereby avoiding any utilities in roads. However, construction within a new ROW would result in the collocation of new towers and power lines adjacent to and across existing utility lines. As described above, the route would parallel and cross several transmission lines and substations along the 26.3-mile route. Therefore, there would be potential for service interruptions of these utilities during construction of the 230 kV line as well.

Under Section 1, Chapter 3.1, "Protection of Underground Infrastructure," Article 2 of California Government Code §§4216-4216.9, IID would be required to contact a regional notification center at

least two days prior to excavation of any subsurface installation. This action would cause Underground Service Alert to notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area. The location of all underground electric, water, gas, cable or telecommunications lines within the vicinity of the substation site would be marked. Notification and marking the locations of existing utilities would allow construction activities to avoid existing lines and would thereby minimize the potential for a co-location accident and impacts would be less than significant (Class III). No mitigation would be required; however, implementation of the measure below would be recommended to further reduce this impact. The full text of the mitigation measures can be found in Appendix 12.

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a co-location accident

S-2c Coordinate with utility providers. [PSU APM 1, PSU APM 2]

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class II for emergency services, Class III)

Water. Water would be required during project construction for dust abatement and cleaning construction equipment. Based on water usage estimates for the Proposed Project, grading and site work for the substation would require an estimated 600,000 gallons/day of water, landscape would use 190,000 gallons/day, and concrete for the substation construction would use an estimated 10,000 gallons/day of water (see Table B 9). However, considerably less grading and earthwork would be needed for the IID substation than for the Central East Substation site. During clearing and grading activities and throughout overhead transmission line construction an average of 27,000 gallons per day of water would be used for dust control and 36 gallons/yard³ would be used for tower construction. Access roads for SRPL and the existing San Felipe Substation would likely be used for the new substation and parallel IID 230 kV transmission line, although new spur roads to the individual towers may be needed. The amount of water required would depend on weather conditions, road surface conditions, and other site specific conditions. Dust suppression efforts would occur on each day that grading activities take place and when construction vehicles use unpaved access roads.

However, water consumption for this purpose would also vary depending on the implementation of typical air quality mitigation measures that would require implementation of a Fugitive Dust Control Plan (see Section D.11, Air Quality) that may specify the use of soil binders on unpaved roads, staging areas, and parking areas, which would substantially minimize water use. Water would also be needed to make the concrete used during project construction and is often used to lubricate the auger during boring operations. Comparatively small amounts of potable water would be needed for sanitary and drinking purposes. It is assumed that IID would provide its own water. Because water usage would be similar to the Proposed Project in the Desert Link, water use during project construction would be a small fraction of the total water supply within the IID jurisdiction and similar to the Proposed Project it would not change the ability of IID to serve demands. Therefore, the water demand for construction of the substation and transmission line would not be a significant impact (Class III) on the regional water supply. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from construction of the transmission upgrades, Mitigation Measure S 3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Substation construction would generate waste largely in the form of soil from earthwork and grading. Transmission line construction would generate waste largely in the form of soil from tower foundation excavations. The quantity of waste would be similar to the Proposed Project, but would depend on the amount of earthwork and grading required at the time of construction. Some percentage of excavate would be clean and dry and would be "spread" along the ROW and/or substation site. No existing structures would be removed. The closest landfills to the substation site and transmission corridor would be:

- Salton City Solid Waste Site (3 miles west of Highway SR86 and 3 miles south of Salton City) that allows a maximum permitted throughput of 50 tons/day and has a remaining capacity of 9,078 cubic yards;
- Holtville Solid Waste Site (2678 Whitlock Road) that allows a maximum permitted throughput of 20 tons/day and has a remaining capacity of 17,006 cubic yards;
- Borrego Landfill (2449 Palm Canyon Road) that allows a maximum permitted throughput of 50 tons/day of waste and has a remaining capacity of 459,856 cubic yards;
- Allied Imperial Landfill (104 East Robinson Road) that allows a maximum permitted throughput of 1,135 tons/day and has a remaining capacity of 2,105,500 cubic yards;
- Imperial Solid Waste Site (1705 West Worthington Road) that allows a maximum permitted throughput of 207 tons/day and has a remaining capacity of 183,871 cubic yards; and
- Calexico Solid Waste Site (New River and Highway 98) that allows a maximum permitted throughput of 150 tons/day and has a remaining capacity of 1,530,950 cubic yards (CIWMB, 2007).

Due to the number and capacity of landfills serving the project area, capacity for materials generated from construction of the San Felipe Substation and 230 kV line (which would be similar to the Proposed Project) would be available. As the waste generated during construction of the IID upgrades would occur over an extended period, the daily waste exported off site would be a fraction of the maximum daily throughput for any of the landfills above. Therefore, construction waste generated by the IID Transmission System Upgrades would not substantially affect the remaining capacities of local landfills to serve local demands (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste, mitigation measures to ensure that maximum recycling activities would occur would be recommended.

Public Services. Construction Workers Demands. Because of the large available labor pool in San Diego and Imperial Counties and nearby areas, few construction workers are expected to temporarily relocate to the area. These workers likely live in the San Diego or El Centro areas and may already work for IID. Therefore, they would not generate additional population that would exceed the capacity of local public service providers listed in Table D.14-2 for the Proposed Project. Construction of the San Felipe Substation would not result in a direct increase in the local population, leading to long term demands to local public services. Nor would the transmission line or substation construction result in any long term requirements that would place a permanent increased demand on emergency service providers that would result in new or expanded facilities. Therefore, the temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection or police protection in the long-term and it would not require the construction or expansion of facilities or services (Class III).

Fire Hazards. Section D.15 (Fire and Fuels Management) discusses how temporary construction activities would result in an increase in potential fire hazards and would increase temporary demands for fire protection services.

Emergency Services. Construction of the project and equipment would impede emergency access through the area (Class II). Implementation of mitigation measures that would require IID to coordinate construction schedules, lane closures, and other activities associated with installation of the substation with emergency and police services would ensure minimal disruption to response times and access for these services. Impacts to emergency access are discussed under Section D.9 (Transportation and Traffic), and would be reduced to less than significant levels. Therefore, impacts to emergency access and/or public services and facilities would be less than significant as well with the incorporation of Mitigation Measure S 3d (Coordinate construction schedule with emergency services).

Mitigation Measures for Impact S-3: Project construction and operation would increase the need for public services and facilities

AQ-1a Implement Fugitive Dust Control Plan.

S-3a Recycle construction waste.

S-3b Use reclaimed water.

S-3d Coordinate construction schedule with emergency services. [PSU APM 3]

Operational Impacts

Increased demands on emergency services would occur if operation of the projects would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in Section D.15 (Fire and Fuels Management) and is not addressed in this section.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would periodically occur, would require water (SRPL has an estimated use of 300 gallons of water per structure). It is assumed that IID would provide its own water and it would be trucked to the individual structures; however, compared to water usage during project construction and the overall supply of IID water, water for washing would be minor and impacts on existing resources and suppliers would be less than significant (Class III). No mitigation would be required.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates levied within the affected jurisdictions. IID's property taxes would increase as a result of the San Felipe Substation and 26 mile 230 kV line. The State of California Board of Equalization (BOE) assesses infrastructure facilities annually. Dispersion of property tax revenue is determined based upon the location of the taxable property. Any increase in property tax revenue as a result of the project would be a beneficial impact to the local economy. The substation and transmission projects would not result in an adverse change in public resource revenue. Furthermore, the IID upgrades would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the new San Felipe Substation and transmission line are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are required.

Impact S-5: Presence of the project would decrease property values (Class III)

The Bannister San Felipe 230 kV transmission line and the San Felipe Substation would be constructed adjacent to the existing SRPL 500 kV corridor and adjacent to the existing San Felipe 92 kV Substation, respectively. Incremental effects on property values that may result from the changes within the corridor resulting from this project would be very small, would diminish over time, and would be very difficult to quantify. Based on the studies discussed under Impact S 5 in Section D.14.5.1, it is concluded that the IID project would not generate effects that would significantly impact property values (Class III). Although not required, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V 3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would help to reduce the visual impacts of the project. It should also be noted that landowners of any private parcels that would be crossed by the route would be compensated by IID for use of an easement across the property.

D.14.12.23 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 linear facilities to be constructed as a result of the presence of the SRPL (if it is approved and constructed). Types of mitigation that would likely reduce potentially significant impacts of the Esmeralda–San Felipe Geothermal Project have been included in the environmental impact analysis below; however, implementation of specific mitigation measures would be developed and executed by Esmeralda at the time of project permitting and approval.

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

Refer to Section D.14.2 (Environmental Setting for the proposed SRPL Project) for a discussion of socioeconomics, public services, and utilities in Imperial County. Water would likely be provided by IID.

Geothermal electrical production is part of the utilities sector, which has a relatively small share of Imperial County's total employment. The 16 geothermal power plants located in the County, together with subcontractors, may support around 600 jobs. However, the industry is an important regional source of electric power, generating over 500 kilowatts of electricity. The industry is also an important revenue source to jurisdictions within Imperial County, representing about 10 percent of the county's property tax base. Additionally, the industry provides relatively inexpensive electrical power to the businesses and residents of Imperial County. Although several geothermal greenhouse operations are located in the Coachella Valley, the Imperial Valley has no geothermal power plants.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III for revenue, Class IV for economic benefits)

Revenue from Business Operations. The Esmeralda-San Felipe Geothermal Project would not require the removal or relocation of any business uses. Approximately 85 percent of the Truckhaven Geothermal Leasing Area is within Ocotillo Wells SVRA, which has an estimated annual use of 15,000 vehicle visits. Visitors to Ocotillo Wells bring revenue to other local businesses, tribes and government. Adverse impacts on local businesses would result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, health and safety concerns, most of which affect recreation impacts to the Ocotillo Wells State Vehicular Recreation Area (SVRA). These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.5 (Wilderness and Recreation), D.8 (Noise), D.9 (Transportation and Traffic), D.10 (Public Health and Safety), and D.11 (Air Quality). Where impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), D.10 (Public Health and Safety) and D.11 (Air Quality) to mitigate potential impacts that would result in a substantial change to local business revenues.

Economic Benefit. Alternatively, employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Additionally, the Truckhaven Geothermal Lease Area is located in unincorporated Imperial County,

and the County and jurisdictions within the County would be the principal recipients of revenues generated by geothermal development in Truckhaven. The geothermal industry is an important revenue source for jurisdictions within Imperial County. The industry's 2005-2006 assessed valuation of \$809 million represents 9.7 percent of the total County's assessed valuation of \$8.3 billion. Revenue generated from the Esmeralda–San Felipe Geothermal Project would contribute to this revenue stream, benefiting to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a co-location accident (Class II)

Although located in a remote area, construction of the geothermal plant and associated linears would have the potential to disrupt other utilities during ground disturbing activities. Under Section 1, Chapter 3.1, "Protection of Underground Infrastructure," Article 2 of California Government Code §§4216-4216.9, Esmeralda would be required to contact a regional notification center at least two days prior to excavation of any subsurface installation. This action would cause Underground Service Alert to notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area. The location of all underground electric, water, gas, cable or telecommunications lines within the vicinity of the substation site would be marked. Notification and marking the locations of existing utilities would allow construction activities to avoid existing lines and would thereby minimize the potential for a co-location accident and impacts would be less than significant (Class III). No mitigation would be required; however, implementation of the measure below would be recommended to further reduce this impact. The full text of the mitigation measures can be found in Appendix 12.

Mitigation Measure for Impact S-2: Construction would disrupt the existing utility systems or cause a co-location accident

S-2c Coordinate with utility providers. [PSU-APM-1, PSU-APM-2]

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class II for emergency services, Class III)

Water. Water would be required during project construction for dust abatement and cleaning construction equipment, although estimates have not been provided. Water would also be needed to make the concrete used during project construction and is often used to lubricate the auger during boring operations. Comparatively small amounts of potable water would be needed for sanitary and drinking purposes. The amount of water required would depend on weather conditions, road surface conditions, and other site-specific conditions. Water consumption for this purpose would also vary depending on the implementation of typical air quality mitigation measures that would require a Fugitive Dust Control Plan (see Section D.11, Air Quality). This Plan may specify the use of soil binders on unpaved roads, staging areas, and parking areas, which would substantially minimize water use. Measures of this type may be required to reduce any water availability impacts (Class II) to a less than significant level and ensure that IID has adequate capacity. To further reduce adverse effects of the cumulative volume of water from the entire Esmeralda-San Felipe project, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Project construction would generate waste largely in the form of soil from earthwork and grading. Transmission line construction would generate waste largely in the form of soil from excavations. Some percentage of excavated material would be clean and dry and would be "spread" along the project site. No existing structures would be removed. The closest landfill to the substation site and

transmission corridor would be the Salton City Solid Waste Site (3 miles west of Highway SR86 and 3 miles south of Salton City) that allows a maximum permitted throughput of 50 tons/day and has a remaining capacity of 9,078 cubic yards. There are additional landfills throughout the project vicinity that could accommodate waste in the event that the Salton City Solid Waste Site is at capacity (see the list of landfills under Impact S-3 for the Imperial Valley Link of the Proposed Project).

Due to the number and capacity of landfills serving the project area, capacity to receive materials generated from construction of the Esmeralda–San Felipe Geothermal Project would be available. As the waste generated during construction of the project would occur over an extended period, the daily waste exported off site would be a fraction of the maximum daily throughput for any of the nearby landfills above. Therefore, construction waste generated by the Esmeralda–San Felipe Geothermal Project would not substantially affect the remaining capacity of local landfills to serve local demands (Class III). Although it is expected that impacts to solid waste facilities would not be significant and no mitigation measure is required, mitigation measures to ensure that maximum recycling activities would occur would be recommended to further reduce adverse effects of the cumulative volume of waste.

Public Services. Construction Workers Demands. Because of the large available labor pool in Imperial County and nearby areas, it is unlikely that more than a few construction workers would immigrate to the area, even on a temporary basis. Both the Coachella Valley and the Imperial Valley have most of the skills in the local work force required for plant construction and thus workers would be supplied locally. Therefore, they would not generate additional population that would exceed the capacity of local public service providers. Construction of the Esmeralda–San Felipe Geothermal Project would not result in a direct increase in the local population, leading to long-term demands to local public services. Nor would construction result in any long-term requirements that would place a permanent increased demand on emergency service providers that would result in new or expanded facilities. Therefore, the temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection or police protection in the long-term and it would not require the construction or expansion of facilities or services (Class III).

Fire Hazards. Section D.15 (Fire and Fuels Management) discusses how temporary construction activities would result in an increase in potential fire hazards and would increase temporary demands for fire protection services.

Emergency Services. Construction of the project and equipment would impede emergency access through the area, especially along SR86 (Class II). Implementation of mitigation measures that would require Esmeralda to coordinate construction schedules, lane closures, and other activities associated with installation of the substation with emergency and police services would ensure minimal disruption to response times and access for these services. Impacts to emergency access are discussed under Section D.9 (Transportation and Traffic), and would be reduced to less than significant levels. Therefore, impacts to emergency access and/or public services and facilities would be less than significant as well with the incorporation of the mitigation below.

Mitigation Measures for Impact S-3: Project construction and operation would increase the need for public services and facilities

- **AQ-1a** Implement Fugitive Dust Control Plan.
- S-3a Recycle construction waste.
- S-3b Use reclaimed water.
- S-3d Coordinate construction schedule with emergency services. [PSU-APM-3]

Operational Impacts

Increased demands on emergency services would occur if operation of the projects would increase the risk of wildland fires. Fire risk related to operation of a geothermal plant and associated transmission lines is discussed in Section D.15 (Fire and Fuels Management) and is not addressed in this section.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class I)

The source and amount of water required for potential operations of two binary plants has not been defined, and the availability and quality of groundwater within the lease area is unknown. Typical groundwater usage for a 30 MW water-cooled binary plant is estimated at 1,000 gallons per minute during summer months. The actual amount would depend on the specific plant design parameters and thus the potential for groundwater overdraft cannot be assessed. Due to the expected low quality of nearby groundwater, it is anticipated that water for drilling and operations would be purchased from a supplier, which would potentially impact water supply. A separate environmental impact assessment will be conducted at the time a project application is received by BLM. Pursuant to NEPA, this assessment will inventory and analyze impacts to public services resulting from the Esmeralda–San Felipe Project. Trucking water to the site and/or mitigation, such as Mitigation Measure S-3b, would likely be required to reduce this impact, but given the low quality of nearby groundwater, if onsite wells were used then the impact on water supply would potentially be significant and unmitigable (Class I)

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3b Use reclaimed water.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

The BLM would receive no revenue from the installation of the IID lines on BLM lands, because local tax revenues do not accrue on federal lands. However, BLM does collect fees annually for ROW Grants. For 2007 (rates are adjusted annually) BLM gets \$14.60 per acre for a ROW in Imperial County and \$43.81 per acre in San Diego County (BLM, 2007). The money goes into the federal general fund and would not directly benefit the BLM El Centro office.

The Proposed Project would not result in an adverse change in public resource revenue. Furthermore, the Proposed Project would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Proposed Project are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are required.

Impact S-5: Presence of the project would decrease property values (Class III)

The Truckhaven leasing Area is comprised of BLM-, State-, and private-owned land. Geothermal development, including the Esmeralda–San Felipe Geothermal Project, would occur on BLM land. State and private parcels within Truckhaven are not necessarily desirable for residential development. As detailed under Impact S-5 under the Imperial Valley Link (see Section D.14.5.1), it is expected that incremental effects on property values that may result from geothermal development within Truckhaven would be very small, would diminish over time, and would be thus be less than significant (Class III). However, a separate assessment would be conducted at the time of project application. Implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce

visual contrast of towers and conductors) and other measures specific to Key Viewpoints, though not required, would help to reduce the visual impacts of the project.

D.14.12.4 Jacumba Substation

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 would 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. Figure B 47 illustrates the approximate location and size of the substation area. 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

Jacumba 500/230 kV Substation. The socioeconomic setting for the Jacumba Substation is identical to that of the Interstate 8 Alternative MP I8 35 (see Section E.1.14).

The Jacumba Substation would be adjacent to the following existing utilities and facilities:

• SDG&E Southwest Powerlink (SWPL) Imperial Valley–Miguel 500 kV transmission line (MP I8-0 to MP I8-35.7) (separated by an average of 400 feet).

Because of its location, water could be obtained from either the IID in Imperial County and SDCWA in San Diego County.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III for revenue, Class IV for economic benefits)

Revenue from Business Operations. There are no businesses near the proposed Jacumba Substation, MP I8-35 as it would reside on private, vacant land. Impacts on local businesses set in the town of Jacumba would result from degradation of views, views of construction equipment and activity,

vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). However, as the Jacumba Substation is approximately 0.5 miles away from the town and situated on a mesa, these impacts are less likely to occur and are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Transportation and Traffic), and D.10 (Public Health and Safety), and D.11 (Air Quality). Where impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Economic Benefit. Alternatively, employment of construction personnel would be beneficial to local businesses and the regional economy in Jacumba through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a co-location accident (Class III)

The new Jacumba Substation would be located adjacent to the existing SWPL transmission line in a sparsely developed area on private, vacant land. Construction of new access roads would be minimal, because the existing access roads to the transmission line would likely be used.

Under Section 1, Chapter 3.1, "Protection of Underground Infrastructure," Article 2 of California Government Code §§4216-4216.9, SDG&E would be required to contact a regional notification center at least two days prior to excavation of any subsurface installation. This action would cause Underground Service Alert to notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area. The location of all underground electric, water, gas, cable or telecommunications lines within the vicinity of the substation site would be marked. Notification and marking the locations of existing utilities would allow construction activities to avoid existing lines and would thereby minimize the potential for a co-location accident and impacts would be less than significant (Class III). No mitigation would be required; however, implementation of the measure below would be recommended to further reduce this impact. The full text of the mitigation measures can be found in Appendix 12.

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a co-location accident

S-2c Coordinate with utility providers. [PSU APM 1, PSU APM 2]

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class II for emergency services, Class III)

Water. Water would be required during project construction for dust abatement and cleaning construction equipment. Based on water usage estimates for the Proposed Project, grading and site work for the substation would require an estimated 600,000 gallons/day of water, landscape would use 190,000

gallons/day, and concrete for the substation construction would use an estimated 10,000 gallons/day of water (see Table B 9); however, considerably less grading and earthwork would be needed at the Jacumba Substation site than at the Central East Substation site so water usage would likely be reduced. Existing access roads for SWPL would likely be used for the Jacumba Substation, although new spur roads to the substation site may be required. The amount of water required would depend on weather conditions, road surface conditions, and other site specific conditions. Dust suppression efforts would occur on each day that grading activities take place and when construction vehicles use unpaved access roads.

Similar to the Proposed Project, water use during project construction would be a comparatively small fraction of the total water supply for the jurisdictions affected and would not change the ability of the water suppliers to serve the project area demands. (See Section D.14.1 for specific data on water availability for the IID and SDCWA.) Reclaimed water would also be available. There are 22 recycled water facilities within SDCWA's territory. The applicant would have to contract with providers to obtain reclaimed water where it is available, and its use would reduce the amount of potable water needed from local water districts along the route. In the event that water suppliers are not able to supply the full amount of water required during construction in the summer months, alternative means of procuring water and/or reducing water usage would be available and the project would not be expected to significantly impact water suppliers (Class III). For example, the use of soil binders (see Mitigation Measure AQ 1a) and reclaimed water would reduce water usage, and nearby districts have available water to serve the Proposed Project if necessary. No mitigation measure is required; however, implementation of Mitigation Measure S 3b (Use Reclaimed Water), would further reduce impacts on local and regional water supplies by encouraging use of reclaimed water where possible.

Solid Waste. Substation construction would generate waste largely in the form of soil from earthwork and grading. The quantity of waste would be similar to the Proposed Project, but will depend on the amount of earthwork and grading required at the time of construction. A percentage of excavate would be clean and dry and would be spread along the ROW. Under this alternative there would be no structure removal. The closest landfills along the length of the route would be (CIWMB, 2007):

- Allied Imperial Landfill (104 East Robinson Road) that allows a maximum permitted throughput of 1,135 tons/day and has a remaining capacity of 2,105,500 cubic yards;
- Imperial Solid Waste Site (1705 West Worthington Road) that allows a maximum permitted throughput of 207 tons/day and has a remaining capacity of 183,871 cubic yards;
- Las Pulgas Landfill (Camp Pendleton) that allows a maximum permitted throughput of 270 tons/day and has a remaining capacity of 9,150,000 cubic yards;
- Otay Landfill (1700 Maxwell Road, Chula Vista) that allows a maximum of 5,830 tons/day and has a remaining capacity of 33,070,879 cubic yards;
- Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic yards; and
- Sycamore Sanitary Landfill (8514 Mast Boulevard) that allows a maximum of 3,965 tons/day and
 has a remaining capacity of 47,388,428 cubic yards. The Sycamore Sanitary Landfill accepts
 asbestos, contaminated soil, mixed municipal waste, sludge (biosolids), agricultural, dead animals,
 tires, shreds, and wood waste (including treated wood).

Due to the number and capacity of landfills serving the area, capacity for materials generated from construction would be available. Because the exact amount of material recycling is unknown, the total

amount of waste requiring landfill disposal is unknown. Recycling activities would greatly reduce the quantity of construction related materials transported to local landfills.

Since the waste generated by construction would occur over an extended period and would be dispersed among the various landfills serving the project route, the daily waste exported off site would be a fraction of the maximum daily throughput for any of the landfills listed above and the landfills have adequate remaining capacity. The Sycamore Sanitary Landfill would accept any contaminated soil, if encountered. Therefore, construction waste generated by the Jacumba Substation would not substantially affect the remaining capacities of local landfills to serve local demands (Class III). Although impacts to solid waste facilities would not be significant (Class III) and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste, Mitigation Measure S 3a (Recycle Construction Waste) would be recommended for implementation to ensure that maximum recycling activities would occur.

Public Services. Construction of the Jacumba Substation would not result in a direct increase in the local population, or lead to long term demands to local public services. Nor would the substation construction result in any long-term requirements that would place a permanent increased demand on emergency service providers that would result in new or expanded facilities. Therefore, the temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection, police protection, or emergency services in the long term and it would not require the construction or expansion of facilities or services (Class III).

Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management) and is not discussed here.

Mitigation Measures for Impact S-3: Project construction and operation would increase the need for public services and facilities

AQ-1a Implement Fugitive Dust Control Plan.

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Increased demands on emergency services would occur if operation of the projects would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in Section D.15 (Fire and Fuels Management) and is not addressed in this section.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would periodically occur, would require water (SRPL has an estimated use of 300 gallons of water per structure). It is assumed that SDG&E would provide its own water and it would be trucked to the substation structure; however, compared to water usage during project construction and the overall supply of the county water, water for washing would be minor and impacts on existing resources and suppliers would be less than significant (Class III). No mitigation would be required.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates levied within the affected jurisdictions. SDG&E's property taxes would increase as a result of the Jacumba Substation. The State of California Board of Equalization (BOE) assesses infrastructure facilities annually. Dispersion of property tax revenue is determined based upon the location of the taxable property. Any increase in property tax revenue as a result of the project would be a beneficial impact to the local economy. The substation would not result in an adverse change in public resource revenue. Furthermore, the Jacumba Substation would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the new Jacumba Substation are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are required.

Impact S-5: Presence of the project would decrease property values (Class III)

The Jacumba Substation would be constructed adjacent to the existing SWPL 500 kV corridor. Incremental effects on property values that may result from the changes within the corridor resulting from this project would be very small, would diminish over time, and would be very difficult to quantify. Please see the discussion of Impact S 5 under the Imperial Valley Link (see Section D.14.5) which addresses in detail the issues associated with the potential for impacts on property values. Implementation of mitigation measures in the Visual Resources section (Section D.3), would help to reduce the visual impacts of the Jacumba Substation. It should also be noted that landowners of the private property on which the substation will be built will be compensated by the applicant for use of that property.

D.14.12.5 SCE La Rumorosa Wind Project

Environmental Setting

United States. The "Rumorosa Wind Developers II" (RWD) project would be connected to the Jacumba Substation MP I8-35, and would follow 1.7 miles of transmission line approximately 1000 feet west of the town of Jacumba in the San Diego County. It is located primarily on private land.

Jurisdictions along this route include Department of Homeland Security (Border Patrol), Caltrans, Union Pacific Railroad, San Diego County Water Authority (SDCWA), and the County of San Diego. Demographics, housing, and public services' and utilities providers' information would be the same as the Proposed Project in the San Diego Counties, which is described in Section D.14.2.

The RWD project would parallel, cross, or be adjacent to the following existing utilities and facilities:

• SDG&E Southwest Powerlink (SWPL) Imperial Valley Miguel 500 kV transmission line (MP I8 0 to MP I8 35.7) (separated by an average of 400 feet)

Mexico. The RWD wind farm and transmission line would be situated near the town of La Rumorosa in the municipality of Tecate. The wind farm and approximately 7 miles of transmission line would be sited on new ROW; however, the bulk of the transmission line, 20 miles, would follow the existing ROW of the Tijuana/Mexicali 230 kV transmission line.

Jurisdictions along the RWD project include the city of La Rumorosa, the municipality of Tecate, and the state of Baja California.

Demographics and Housing. The municipality of Tecate consists of 5 incorporated cities and a number of unincorporated communities. It has approximately 91,000 people, and a population density of roughly 60 people per square mile, although in actuality 75% of the population of Tecate lives in the capital city of Tecate. (Tecate Government, 2007) Table D.14-13 identifies the Demographic Characteristics of the La Rumorosa region.

Public Services and Utilities. The Department of Fire and Civil Safety is located in the city of Tecate and is the primary law enforcement agency in the municipality of Tecate. This Department has five divisions, Administrative Department, the Technical Department, Department of Operations, and the Department of Civil Protection. The town of La Rumorosa has three schools, the Secundaria Técnica Rafael Ramírez, the primary school Benito Juárez, and the primary school Dr. Aubanel Vallejo.

The existing utility providers in the La Rumorosa region are the Comisión Federal de Electricidad (CFE). The electricity for this region comes primarily from the two La Rosita power plants and travels along the existing 230 kV Tijuana/Mexicali transmission line. The La Rumorosa Substation is located approximately 6 miles to the east of La Rumorosa.

Ta	ole D.14-13. Demographic Characteristic	cs - RWD Project (Mexico)

Location	2005 Estimated Population	2005 Estimated Housing Units	2005 Estimated Employed
Tecate	91,034	22,003	Labor Force: 27,078 persons Construction Occupations: 7.3% Unemployed: 295 persons
La Rumorosa	1615	465	

Source: Mexico Census, 2005.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III or IV)

United States

Revenue from Business Operations. A few business uses occur along the RWD transmission line route, especially near the town of Jacumba, but the project would not require the removal or relocation of any business uses. Impacts on local businesses could result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Traffic/Transportation), and D.10 (Public Health and Safety). Where impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Traffic/Transportation), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that could result in a substantial change to local business revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in San Diego County, creating new temporary and permanent employment in this county. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Mexico

Revenue from Business Operations. Business uses occur along the RWD transmission line route, especially around the towns of La Rumorosa, Agua Hechicera, and Jácume, but the project would not require the removal or relocation of any business uses. Impacts on local businesses would be similar to those in the U.S. region described above (Class III).

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be most likely drawn from local populations in San Diego County. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a co-location accident (Class II)

United States and Mexico. Construction of the RWD project transmission line and related infrastructure has the potential to disrupt existing utilities during excavation, as a result of potential accidents. Therefore, there would be potential for service interruptions of these utilities during construction of the RWD project.

Installation of the transmission line would occur presumably with the Jacumba Substation which would be in service. Therefore, there would be potential for Jacumba Substation service interruptions. Electrical systems are designed with redundant means to provide service. If it is necessary to take a particular circuit out of service, SDG&E would first ensure that a redundant feed is available.

In Mexico, a 20 mile transmission line would be built within the Tijuana/Mexicali transmission line ROW. As such there is the potential to disrupt existing utilities during excavation, as a result of potential accidents.

The potential for construction to disrupt the existing utility systems is considered to be mitigable to less than significant levels (Class II). Implementation of Mitigation Measures S 2a through S 2c would reduce this impact to less than significant. The full text of the mitigation measures can be found in Appendix 12.

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a co-location accident

S-2a Notify public of utility service interruption.

S-2b Protect underground utilities.

S-2c Coordinate with utility providers. [PSU APM 1, PSU APM 2]

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class II for emergency services, or Class III for the United States; No Available Data for Mexico)

United States

Water. Water would be required during construction of the RWD project for dust abatement and cleaning construction equipment. The amount of water required depends on the length of access roads used, weather conditions, road surface conditions, and other site specific conditions. Dust suppression efforts would occur on each day that grading activities take place and on unpaved access roads. Water consumption for this purpose would also vary depending on the implementation of the air quality Mitigation Measure AQ 1a (Implement Fugitive Dust Control Plan) that specifies the use of soil binders on unpaved roads, staging areas, and parking areas, which would substantially minimize water use. Nonpotable water would be used for dust control when available. Water would also be needed to make the concrete used during project construction. Comparatively small amounts of potable water would be needed for sanitary and drinking purposes.

Once constructed, the RWD project would require small amounts of water for maintenance activities. Water use during project construction would be a small fraction of the total water supply for the jurisdictions affected by the RWD project and would not change the ability of the water suppliers identified previously in serving the project area demands

Solid Waste. A percentage of excavation would be clean and dry, and would be spread along the construction ROW. Under this project there would be no structure removal. The closest landfills near the RWD project include the (CIWMB, 2007):

- Allied Imperial Landfill (104 East Robinson Road) that allows a maximum permitted throughput of 1,135 tons/day and has a remaining capacity of 2,105,500 cubic yards
- Imperial Solid Waste Site (1705 West Worthington Road) that allows a maximum permitted throughput of 207 tons/day and has a remaining capacity of 183,871 cubic yards
- Las Pulgas Landfill (Camp Pendleton) that allows a maximum permitted throughput of 270 tons/day and has a remaining capacity of 9,150,000 cubic yards
- Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic yards
- Sycamore Sanitary Landfill (8514 Mast Boulevard) that allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards. The Sycamore Sanitary Landfill accepts asbestos, contaminated soil, mixed municipal waste, sludge (biosolids), agricultural, dead animals, tires, shreds, and wood waste (including treated wood).

Due to the number and capacity of landfills serving the RWD area, capacity for materials generated from construction would be available. Because the exact amount of material recycling is unknown, the total amount of waste requiring landfill disposal is unknown. Recycling activities would greatly reduce the quantity of construction related materials transported to local landfills.

As the waste generated by construction would occur over an extended period and would be dispersed among the various landfills serving the project area, the daily waste exported off site would be a fraction of the maximum daily throughput for any of the landfills listed above and the landfills have adequate remaining capacity. The Sycamore Sanitary Landfill would accept any contaminated soil, if

encountered (Section D.10, Public Health and Safety, discusses impacts in the event that contaminated soil is encountered). Construction waste generated by the RWD project would not substantially affect the remaining capacities of local landfills to serve local demands (Class III). Although impacts to solid waste facilities would not be significant (Class III) and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste, Mitigation Measure S 3a is recommended for implementation to ensure that maximum recycling activities would occur.

Public Services. Neither construction nor operation of the RWD project is expected to result in a direct increase in the local population, leading to long term demands to local public services (see also Section H [Growth Inducing Effects] for a complete discussion of population impacts). The RWD project is not expected to result in any long term requirements that would place a permanent increased demand on emergency service providers that would result in new or expanded facilities. The temporary addition of construction personnel would not substantially increase any demands on schools or hospitals or lower the level of service for fire protection or police protection in the long term.

However, as described in Section D.15 (Fire and Fuels Management), temporary construction activities would result in an increase in potential fire hazards and could increase temporary demands for fire protection services. Construction of the project and equipment would impede emergency access through the area (Class II). Available mitigation includes coordinating construction schedules, lane closures, and other activities with installation of the RWD project with emergency and police services to ensure that disruption to response times and access is minimized. Preparation of a project specific Fire Prevention and Response Plan (FPRP), which would be reviewed by pertinent regulatory authorities, is also recommended. However, overall implementation of Mitigation Measure S 3d (Coordinate construction schedule with emergency services) is necessary to reduce impacts to emergency access to a less than significant level.

Mexico

Water. Water required during construction of the RWD project in Mexico would be approximately 2.5 acre foot. Once constructed, the RWD project would require small amounts of water for maintenance activities. Water use during RWD project construction would be a small fraction of the total water supply for the entire Tecate jurisdiction. However, the Tecate Municipality is already under water strain. As such, the applicant would be subject to any rules and regulations concerning water usage within the region.

Solid Waste. A percentage of excavation would be clean and dry, and would be spread along the construction ROW. Under this project there would be no structure removal. Although a landfill does exist in La Rumorosa, it has limited space and limited contamination treatment. The closest viable landfills near the RWD project include those in the city of Tecate and in the city of Mexicali, and the waste generated would be subject to the rules and regulations according to the Department of Public Cleanliness (Departamento de Aseo Público) for each city (Mexicali Government, 2007; Tecate Government, 2007). Exact data as to the capacity of these landfills is unknown, as this information is not published on the municipal websites. The exact amount of material recycling is also unknown, and therefore the total amount of waste requiring landfill disposal is unknown. Recycling activities would, however, greatly reduce the quantity of construction related materials transported to local landfills.

Public Services. Neither construction nor operation of the RWD project in Mexico is expected to result in a direct increase in the local population, leading to long term demands to local public services as described above in the U.S. section. There would be no impacts to public services.

Mitigation Measures for Impact S-3: Project construction would increase the need for public services and facilities

AQ-1a Implement Fugitive Dust Control Plan.

S-3a Recycle construction waste.

S-3d Coordinate construction schedule with emergency services. [PSU APM 3]

Operational Impacts

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

United States. Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Property taxes for the project sites are expected to increase as a result of the RWD project. The State of California Board of Equalization (BOE) assesses infrastructure facilities annually. Dispersion of property tax revenue is determined at a local level based upon the location of the taxable property. Any increase in property tax revenue as a result of the RWD project would result in a beneficial impact to the local economy as a result of tax revenue spending.

Therefore, the RWD project would not result in an adverse change in public resource revenue. Furthermore, the project would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Potential changes to public agency revenues as a result of the RWD project are considered a beneficial (Class IV) impact.

Mexico. Local property tax revenues and regulations within Mexico are unknown at this time. Therefore any changes to property taxes for the RWD project are also unknown. However, any increase in property tax revenue as a result of the RWD project would result in a beneficial impact to the local economy as a result of tax revenue spending (Class IV).

Furthermore, the project would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Potential changes to public agency revenues as a result of the RWD project are considered a beneficial impact; however, there is no specific data available at this time.

Impact S-5: Presence of the project would decrease property values (Class III)

United States. The RWD project would include a 1.7 mile transmission line to connect the project to the Jacumba Substation and on to the existing SWPL transmission line. During the public scoping process for the proposed SRPL project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, the discussion of Impact S 5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities such as transmission lines in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects.

The data that would be required to conduct a detailed analysis of the RWD project impacts to property values are unavailable as they would be based on future property values. The conclusions of the studies discussed in Section D.14.5 state that overhead transmission lines can, in some instances, reduce the value of nearby properties. However, as discussed in Section D.14.5, incremental effects on property values that may result from overhead transmission lines would be very small, would diminish over

time, and would be very difficult to quantify. Based on the studies discussed under Impact S 5 in Section D.14.5, it is likely that the RWD project would not generate effects that would significantly impact property values.

Mexico. The RWD project would include a wind farm east of the town of La Rumorosa, 20 miles of transmission line along the existing Tijuana/Mexicali ROW, and approximately 7 miles of transmission line along a new ROW. The data that would be required to conduct a detailed analysis of the RWD project impacts to property values in Mexico are unavailable as they would be based on future property values and on current property values in the region which are unknown. The conclusions of the studies discussed in Section D.14.5 state that overhead transmission lines can, in some instances, reduce the value of nearby properties. However, as discussed in Section D.14.5, incremental effects on property values that may result from overhead transmission lines would be very small, would diminish over time, and would be very difficult to quantify. Based on the studies discussed under Impact S-5 in Section D.14.5, it is likely that the RWD project would not generate effects that would significantly impact property values. Impacts resulting from the presence of wind towers/turbines would be expected to be similar.

D.14.13 Overall Socioeconomic Impacts of Proposed Project

Environmental Impacts and Mitigation Measures

Construction Impacts

Most socioeconomic impacts associated with transmission lines and towers along the proposed route would be less than significant. Implementation of Applicant Proposed Measures (APMs) as part of the Proposed Project and of mitigation measures, such as those specified in Section D.3 (Visual Resources) and Section D.5 (Wilderness and Recreation) would reduce impacts of the project that would affect businesses, property values, or other utilities and public services in the area. Fire risks and the cost of suppression are discussed under Section D.15 (Fire and Fuels Management).

Some businesses, especially tourism within ABDSP, may experience an adverse effect during construction that would lead to a decrease in revenues (Impact S-1 – Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments). This impact would be less than significant (Class III), except in ABDSP where impacts to the recreational experience would cause a decline in the tourism industry and associated revenues that would be significant and unmitigable (Class I). Mitigation Measures WR-1a (Coordinate construction schedule and activities with the authorized officer for the recreation area), WR-1b (Provide temporary detours for trail users), and WR-1c (Coordinate with local agencies to identify alternative recreation areas) would reduce impacts to recreationists and park visitors, and would thereby reduce impacts on tourism revenues but still the impact would remain significant. Alternatively, project construction would also cause an increase in revenues for some businesses in the project area which is considered to be beneficial impacts (Class IV).

As listed in Section D.14.2, there are many existing utilities both overhead and underground along the project route that would be disrupted accidentally during project construction. Impact S-2 (Construction would disrupt the existing utility systems or cause a collocation accident) would be less than significant (Class III) with implementation of APMs and compliance with the California Government Codes for overhead construction. Off-road construction on agricultural lands would disrupt underground irrigation

pipes on agricultural lands (Class II). Implementation of AG-2a (Avoid interference with agricultural equipment), which specifies that any accidental damage to underground irrigation pipes shall be repaired or the farmer will be compensated accordingly, would reduce this impact to a less than significant level. Due to the greater density of existing utilities in close proximity to the proposed route and concealed visibility, the probability of an accidental utility disruption is potentially significant (Class II) with underground construction. There is also the potential for unavoidable temporary service interruptions (Class II). Implementation of Mitigation Measures S-2a (Notify public of utility service interruption) and S-2b (Protect underground utilities) would reduce these impacts to less than significant levels.

Because no workers would permanently relocate to the project area, there would be no long-term increased demand on public service providers. Construction of the project would occur over a 30-month period and over a 150-mile area that has adequate public services and facilities to support the entire project (see Section D.14.2). In addition the geographic extent and timeframe would spread the demand on public services and facilities, such as water and solid waste disposal, resulting in greater capacity to accommodate the project and less than significant impacts.

Regardless, taken together, the project would result in removal of 414 wood poles, 48 wood H-frame, and 1 steel pole (for more detail see Table B-12 in Section B) that would have to be disposed of at a landfill or recycling facilities. Although impacts would not be significant (Class III) and no mitigation measure is required, to further reduce adverse effects of this volume of waste, Mitigation Measure S-3a (Recycle construction waste) has been recommended for implementation to ensure that maximum recycling activities would occur. Impacts to solid waste facilities would not be significant.

All substations work (except at a new Central East Substation) would occur within the existing already-disturbed substation footprints. New structures and equipment would be similar to the respective structures already in place at the various substations. Because the work would be minor and it would be located within existing SDG&E-owned facilities, Impacts S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses), S-3 (Project construction and operation would increase the need for public services and facilities), S-4 (Property tax revenues and/or fees from project presence would substantially benefit public agencies), and S-5 (Presence of the project would decrease property values) would not occur.

Because modification work would be performed within and next to electric facilities, there is the potential for an accidental disruption to the existing utility systems (Impact S-2 – Construction would disrupt the existing utility systems or cause a collocation accident). However, all of the substations are owned and operated by SDG&E and thus crews are familiar with the facility and damage would not be caused to a third-party operator. Work is routinely performed within the substations and in the event that any accidental damage was to occur, operational employees are trained to respond and minimize/avoid any potential service interruptions by transferring load. Electrical systems are designed with redundant means to provide service. Therefore, impacts to existing utilities from the substation modifications would be less than significant (Class III) and no mitigation measure is required.

Similar to the other substation work, the proposed Central East Substation would be built on land already owned by SDG&E. However, the Central East Substation would involve construction of a new 500/230 kV substation and extensive grading and earthwork. Because the modifications to Imperial Valley, Sycamore Canyon, Peñasquitos, San Luis Rey, and South Bay would be very minor, Impacts S-2 (Construction would disrupt the existing utility systems or cause a collocation accident) and S-3 (Project construction and operation would increase the need for public services and facilities) would be less than significant and the same as what was discussed under the Central East Substation in Section D.14.5.3 above.

Operation Impacts

Property tax revenues to local governments would increase with the presence of a new transmission line on private lands in their jurisdiction (Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies), which is considered to be beneficial impacts (Class IV).

There has been much public concern about the negative impact of the project presence on property values. Impact S-5 (Presence of the project would decrease property values) has been found to be less than significant for all areas of the Proposed Project, because numerous studies conclude that these effects are usually smaller than anticipated and essentially impossible to generally quantify due to the individuality of properties/neighborhoods, differences in personal preferences of individual buyers/sellers, and the weight of other factors that contribute to a person's decision to purchase a property. In addition, across the board studies have generally concluded that over time any adverse property value impacts diminish and within five years the change is negligible. As a result, this impact is considered to be less than significant (Class III).

Environmental Impacts and Mitigation Measures for Alternatives Along Proposed Project Route

Table D.14-14 summarizes the impacts that have been identified for the alternatives along the Proposed Project route.

Impact No.	Description	Impact Significance
•	n Alternative	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class II/III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II/III
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
DG&E West	of Dunaway Alternative	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class III
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
DG&E West	Main Canal-Huff Road Modification Alternative	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class II/III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class III
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III

Impact No.	Description	Impact Significance
	ground 230 kV ABDSP SR78 to S2 Alternative	<u> </u>
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class I/III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II
S-3	Project construction and operation would increase the need for public services and facilities	Class II/III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
Overhead 50	0 kV ABDSP within Existing ROW Alternative	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class I/III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II/III
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
Santa Ysabel	Existing ROW Alternative	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class III
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
Santa Ysabel	Partial Underground Alternative	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
Santa Ysabel	SR79 All Underground Alternative	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class II/III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
SDG&E Mesa	Grande Alternative	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class III
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III

Impact No.	Description	Impact Significance
CNF Existing	69 kV Route Alternative	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class III
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
Oak Hollow F	Road Underground Alternative	
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
San Vicente	Road Transition Alternative	
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
Chuck Wago	n Road Alternative	
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
Pomerado Ro	oad to Miramar Area North	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
Los Peñasqu	itos Canyon Preserve and Mercy Road Alternative	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III
Black Mount	ain to Park Village Road Underground Alternative	
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class III/IV
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class II
S-3	Project construction and operation would increase the need for public services and facilities	Class III
S-4	Property tax revenues and/or fees from project presence would substantially benefit public agencies	Class IV
S-5	Presence of the project would decrease property values	Class III

Table D.14-14. Impacts Identified – Alternatives – Socioeconomics, Services, and Utilities				
Impact No.	Description	Impact Significance		
Coastal Link	System Upgrade Alternative			
S-1	Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments	Class III/IV		
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class III		
S-3	Project construction and operation would increase the need for public services and facilities	Class III		
Top of the World Substation Alternative				
S-2	Construction would disrupt the existing utility systems or cause a collocation accident	Class III		
S-3	Project construction and operation would increase the need for public services and facilities	Class III		

D.14.14 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.

D.14.14.1 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. 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

Similar to the proposed route, the alternative would be located in unincorporated Imperial County. Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Imperial Valley Link, which is described in Section D.14.2.1. The alternative route would diverge from the proposed route at MP 3 where it would be parallel to the existing SWPL #1 corridor. The route would cross the Westside Main Canal between ALT MP 1 and ALT MP 3. The FTHL Alternative would also cross the Forgetmenot Canal, Foxglove Canal, Forgetmenot Drain, and Dixie Drain No. 4.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class II for agricultural revenue, Class III for business revenue, Class IV for economic benefits)

Revenue from Business Operations. Business uses occur along the route, but the alternative would not require the removal or relocation of any business uses. Impacts on local businesses would result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise),

D.9 (Transportation and Traffic), and D.10 (Public Health and Safety). Where Proposed Project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Revenue from Agricultural Operations. Construction of new 500 kV towers in the agricultural areas of Imperial County would require construction equipment to traverse the agricultural land. This would temporarily restrict crop production or would damage crops if activities occurred during the growing season. The restriction of crop production or damage to crops would potentially decrease revenues for the agricultural landowners whose crops would be affected by project activities (Class II). Overall, as discussed in Section D.6 (Agricultural Resources), land under active agricultural operation (forage crops and a dairy) would be impacted by construction activities. This would involve the construction and/or expansion of access roads, the installation of tower structures and wires, and the presence/staging of construction equipment and vehicles. Impacts on dairy operations and associated mitigation measures are discussed in Section D.6.5.1 (Agricultural Resources). Because impacts to Active Agricultural Operations would be less than significant with incorporation of APMs and mitigation and farmers would be compensated for any crop losses (APM LU-3), any associated impacts to crop and/or dairy revenues would be less than significant. Therefore, no additional mitigation measures are recommended outside of those presented in Section D.6 (Agricultural Resources) to mitigate potential impacts that would result in a substantial change to local agricultural revenues. The full text of the mitigation measures can be found in Appendix 12.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Mitigation Measures for Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments

AG-1a Avoid interference with agricultural operations.

AG-1c Coordinate with grazing operators.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II on agricultural lands, Class III)

Construction of tower foundations would not be within any roadways, thereby avoiding any utilities in roads. The alternative would not parallel or cross any existing transmission lines or major utilities. Therefore, the potential for a collocation accident is low and the impact would be less than significant (Class III). Issues and measures related to the crossing of IID canals are discussed in Section D.12, Water Resources.

Agricultural Lands. On off-road agricultural lands there is the potential to accidentally disrupt underground irrigation pipes and/or drain tile systems during excavation or other ground disturbing construction activities (Class II). Tile lines are generally buried 4.5 to 9 feet below the ground surface. However,

Mitigation Measure AG-1a (Avoid interference with agricultural operations) specifies that SDG&E must coordinate with property owners and tenants to ensure that project construction will be conducted so as to avoid interference with agricultural operations. Implementation of Mitigation Measure AG-1a would reduce impacts to Active Agricultural Operations and disruption to existing agricultural irrigation and drain tile systems to less than significant levels.

Mitigation Measure for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

AG-1a Avoid interference with agricultural operations.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because overhead construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar on a per-mile/structure basis. An average of 27,000 gallons per day of water would be used for dust control and 36 gallons/yard³ of water would be used for tower construction (including concrete from batch plants), which like the proposed route would not affect water suppliers, such as IID, or change their ability to serve demand. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the project and/or alternative segments, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Approximately 80 percent of excavated material would be clean and dry and would be spread along the ROW. There would be adequate water supply and landfill capacity, because construction of this 4.9-mile segment would represent a fraction of the overall public service requirements of the Proposed Project (see Section D.14.5) or existing facilities' supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be trucked to the individual structures from the IID power plant in El Centro; however, compared to water

usage during project construction and IID's overall water supply, water for washing would be minor for this short alternative and impacts on existing resources and suppliers would be less than significant (Class III).

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route. In addition, the alternative route would be located on primarily private land rather than BLM land, which would increase the dispersion of property tax revenue to local jurisdictions, because local property taxes only accrue on private property. For that portion of the alternative on BLM land, BLM would receive no tax revenue, but would collect fees annually for ROW Grants. For 2007 (rates are adjusted annually) BLM would receive \$14.60 per acre for a ROW in Imperial County (BLM, 2007). This money would go into the federal general fund and would not directly benefit the BLM El Centro office.

The alternative would not result in an adverse change in public resource revenue. Furthermore, the FTHL Eastern Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the FTHL Eastern Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the Proposed Project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, the discussion of Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities, such as transmission lines, in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects. As also discussed in Section D.14.5.1, any changes in property values would not be a substantial decrease and this impact is considered to be less than significant (Class III). Although not required because the impact is less than significant, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would help to reduce the visual impacts of the project, which is one of the components perceived to affect property values.

D.14.14.2 SDG&E West of Dunaway Alternative

This 6.1-mile alternative was suggested by SDG&E and favored 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

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Imperial Valley Link, which is described in Section D.14.2.1.

The route would parallel the existing SWPL #1 corridor approximately 1.7 miles farther west-northwest than the Proposed Project. Just west of where the alternative would rejoin the Proposed Project (near ALT MP 6), it would cross north of IID's Dixieland Substation.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III for revenue, Class IV for economic benefits)

Revenue from Business Operations. Business uses occur along the route, but the alternative would not require the removal or relocation of any business uses. Impacts on local businesses would result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Transportation and Traffic), and D.10 (Public Health and Safety). Where Proposed Project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

Construction of tower foundations would not be within any roadways, thereby avoiding any utilities in roads. The alternative would not cross any active agricultural lands and so it would not disrupt any underground irrigation pipes.

However, the alternative route would parallel the existing 500 kV SWPL #1 for 1.7 miles and would cross north of IID Dixieland Substation causing the potential for an existing utility disruption in the event of an accident. Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2, Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Although accidental disruptions could occur, compliance with California Government Code §§4216-4216.9 (see Anza-Borrego Link impact discussion in Section D.14.5 for more detail) and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions. Therefore, potential impacts related to a collocation accident or utility disruption would be less than significant (Class III). No mitigation measure is required.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because overhead construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar on a per-mile/structure basis. An average of 27,000 gallons per day of water would be used for dust control and 36 gallons/yard³ of water would be used for tower construction (including concrete from batch plants), which like the proposed route would not affect water suppliers or change their ability to serve demand. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the project and/or alternative segments, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Approximately 80 percent of excavated material would be clean and dry and would be spread along the ROW. No structures would be removed. There would be adequate water supply and landfill capacity, because construction of this 4.9-mile segment would represent a fraction of the overall public service requirements of the Proposed Project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a, Recycle construction waste, would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be trucked to the individual structures; however, compared to water usage during project construction, water for washing would be minor for this short alternative and impacts on existing resources and suppliers would be less than significant (Class III).

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route and for that portion of the alternative on BLM land, BLM would receive no tax revenue, but would collect fees annually for ROW Grants. The alternative would not result in an adverse change in public

resource revenue. Furthermore, the West of Dunaway Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the West of Dunaway Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the Proposed Project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, the discussion of Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities such as transmission lines in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects. As also discussed in Section D.14.5.1, any changes in property values would not be a substantial decrease and this impact is considered to be less than significant (Class III). Although not required because the impact is less than significant, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would help to reduce the visual impacts of the project, which is one of the components perceived to affect property values.

D.14.14.3 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

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Imperial Valley Link, which is described in Section D.14.2.1. The alternative would cross and then parallel IID's 92 kV transmission line. The route would also parallel the Westside Main Canal, and the Fillaree Canal and the Fillaree Drain. The Westside Main Canal supplies 775,526,400 gallons/day of water (IID, 2007).

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class II for agricultural revenue, Class III for business revenue, Class IV for economic benefits)

Revenue from Business Operations. Business uses occur along the route, but the alternative would not require the removal or relocation of any business uses. Impacts on local businesses would result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). These issues

are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Transportation and Traffic), and D.10 (Public Health and Safety). Where Proposed Project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Revenue from Agricultural Operations. Construction of new 500 kV towers in the agricultural areas of Imperial County would require construction equipment to traverse the agricultural land. This would temporarily restrict crop production or damage crops if activities occurred during the growing season. The restriction of crop production or damage to crops would potentially decrease revenues for the agricultural landowners whose crops would be affected by project activities. This alternative would traverse Active Agricultural Operations throughout its entire length. As discussed in Section D.6 (Agricultural Resources), land under active agricultural operation would be impacted by construction activities, a portion of which would be permanent (Class II). This would involve the construction and/or expansion of access roads, the installation of tower structures and wires, and the presence/staging of construction equipment and vehicles. Because impacts to Active Agricultural Operations would be less than significant with incorporation of APMs and mitigation and farmers would be compensated for any significant crop losses, any associated impacts to crop and/or dairy revenues would be less than significant. Therefore, no additional mitigation measures are recommended outside of those presented in Section D.6 (Agricultural Resources) to mitigate potential impacts that would result in a substantial change to local agricultural revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Mitigation Measures for Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments

AG-1a Avoid interference with agricultural operations.

AG-1c Coordinate with grazing operators.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II for agricultural lands, Class III)

Construction of tower foundations would not be within any roadways, thereby avoiding any utilities in roads. However, the alternative route would cross and then parallel the existing IID 92 kV transmission line along the west side of Huff Road causing the potential for an existing utility disruption in the event of an accident. Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2, Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Although accidental disruptions could occur, compliance with the California Government Code §§4216-4216.9 (see Anza-

Borrego Link impact discussion in Section D.14.5 for more detail) and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions. Therefore, potential impacts related to a collocation accident or utility disruption would be less than significant (Class III). No mitigation measure is required.

The alternative route would traverse near the Westside Main Canal and Fillaree Canal throughout its length. The alternative has the potential to impact the IID canals during construction of the transmission line. Issues and measures related to the crossing of IID canals are discussed in Section D.12 (Water Resources) and D.4 (Land Use).

Agricultural Lands. On off-road agricultural lands, there is the potential to accidentally disrupt underground irrigation pipes and/or drain tile systems during excavation or other ground disturbing construction activities (Class II). Tile lines are generally buried 4.5 to 9 feet below the ground surface. However, Mitigation Measure AG-1a (Avoid interference with agricultural operations) specifies that SDG&E must coordinate with property owners and tenants to ensure that project construction will be conducted so as to avoid interference with agricultural operations. Implementation of Mitigation Measure AG-1a would reduce impacts to Active Agricultural Operations and disruption to existing agricultural irrigation and tiling systems to less than significant levels.

Mitigation Measure for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

AG-1a Avoid interference with agricultural operations.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because overhead construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar on a per-mile/structure basis. An average of 27,000 gallons per day of water would be used for dust control and 36 gallons/yard³ of water would be used for tower construction (including concrete from batch plants), which like the proposed route would not affect water suppliers, such as IID and El Centro, or change their ability to serve demand. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the project and/or alternative segments, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Approximately 80 percent of excavated material would be clean and dry and would be spread along the ROW. No structures would be removed. There would be adequate water supply and landfill capacity, because construction of this 4.9-mile segment would represent a fraction of the overall public service requirements of the Proposed Project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be trucked to the individual structures; however, compared to water usage during project construction, water for washing would be minor for this short alternative and impacts on existing resources and suppliers would be less than significant (Class III).

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route. The alternative would not result in an adverse change in public resource revenue. Furthermore, the SDG&E West Main Canal–Huff Road Modification Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the SDG&E West Main Canal–Huff Road Modification Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the Proposed Project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, the discussion of Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities such as transmission lines in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects. As also discussed in Section D.14.5.1, any changes in property values would not be a substantial decrease and this impact is considered to be less than significant (Class III). Although not required because the impact is less than significant, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would help to reduce the visual impacts of the project, which is one of the components perceived to affect property values.

D.14.15 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.

D.14.15.1 Partial Underground 230 kV ABDSP SR78 to 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 through ABDSP. 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, in which the entire length of the 230 kV transmission line between the San Felipe Substation and the connection to the Proposed Project would be installed underground in Highways SR78 and S2.

Environmental Setting

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Anza-Borrego Link, which is described in Section D.14.2.2, and the Central Link, which is described in Section D.14.2.3.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class I for revenue and FTSE, Class IV for economic benefit)

Revenue from Business Operations. This alternative is primarily located within Anza Borrego Desert State Park and also along Highway S2 west of the Park boundary. As previously described, portions of this alternative would be constructed underground within SR78, which would require temporary closure of this State-designated scenic highway. Additionally, construction activities would create a number of temporary conditions that may dissuade recreationists from visiting the park. For example, noise, dust and traffic generated during construction activities negatively affect a visitor's enjoyment of the recreation area. The location of construction equipment may temporarily preclude access to recreation areas, especially in the vicinity of SR78. SR78 is the main access route to ABDSP and its closure would cause disturbance to recreational activities and may temporarily reduce access and visitation to portions of ABDSP, resulting in potentially significant impacts to businesses related to the tourism industry within ABDSP. Construction activities for the segment of this alternative that would be constructed along S2 would not reduce access to recreation or wilderness areas; this stretch of highway does not serve as an access route for recreation or wilderness areas within the Central Link.

As discussed for Impact S-1 under the Anza-Borrego Link for the Proposed Project above, all of the revenue goes into the State's General Fund, and therefore, any change in money generated at the Park would be only a fraction of the total State budget and it would not impact the Park's distribution for the following year. However, revenues from the Anza-Borrego Foundation and Institute (ABFI) also support the Park. The ABFI is in charge of the sales of books and merchandise at the ABDSP Visitor Center, and those funds return to the Park in the form of grants. If construction of the alternative route were to cause a change in revenue to the ABFI Visitors' Center then the purchase of future inholdings and other ABFI-funded programs would be affected.

Although Park revenues would not affect the Park's distribution for the following year, the recreational impacts from project construction would result in a potentially significant impacts to businesses related to the tourism industry and at the ABFI Visitors' Center (Class II). These issues and potential impacts that would potentially reduce visits are analyzed extensively in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.5 (Wilderness and Recreation), D.8 (Noise), and D.9 (Transportation and Traffic). Implementation of Mitigation Measures WR-1a (Coordinate construction schedule and activities with the authorized officer for the recreation area), WR-1b (Provide temporary detours for trail users), WR-1c (Coordinate with local agencies to identify alternative recreation areas) in Section D.5 (Wilderness and Recreation) would minimize construction-related impacts to ABDSP. By reducing impacts that would affect the recreational experience, it would thereby also reduce short-term impacts on the related tourism industry. With the implementation of measures, such as those that would coordinate the construction schedule recommend detours, associated local business revenue impacts would be reduced. Nonetheless, a complete overlap of the alternative's construction schedule and tourist season for ABDSP would cause a reduction in visitation and access to recreation and wilderness areas, resulting in a significant and unmitigable impact to Wilderness and Recreation (see Impact WR-1 in Section D.5). Likewise, this impact would result in significant and unmitigable impacts to businesses related to the tourism industry and at the ABFI Visitors' Center (Class I).

Future Transmission System Expansion. It should be noted that with this alternative there is the possibility that as many as four additional 230 kV circuits would be constructed through the Park in the future. There is the possibility that some or all of these circuits would be underground in roadways, as the duct bank for the SRPL project could include extra space for future cables or be consolidated enough to fit a similar duct bank on the other side of the roadway for future phases (see the description in Appendix 1, Section 4.3.1). If two duct banks were installed at the sides of the road, one for the Partial Underground 230 kV ABDSP SR78 to S2 Alternative and one for future circuits (as opposed to one big duct bank in the middle of the roadway), traffic management would be easier and one duct bank would be built now and the second one could be added at a future time. Similar impacts and mitigation measures would need to be implemented to reduce construction disturbances and impacts to business revenues.

Nonetheless, a complete overlap of the future transmission system expansion construction schedule and tourist season for ABDSP would cause a reduction in visitation and access to recreation and wilderness areas, resulting in a significant and unmitigable impact to Wilderness and Recreation (see Impact WR-1 in Section D.5). Likewise, this impact would result in significant and unmitigable impacts to businesses related to the tourism industry and at the ABFI Visitors' Center (Class I). The full text of the mitigation measures can be found in Appendix 12.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services outside of ABDSP. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties within the geographic scope of the project area. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Mitigation Measure for Impact S-1: Project construction and/or transmission line presence would cause a substantial change in revenue for businesses

- WR-1a Coordinate construction schedule and activities with the authorized officer for the recreation area.
- WR-1b Provide temporary detours for trail users.
- WR-1c Coordinate with local agencies to identify alternative recreation areas.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Construction of the Partial Underground 230 kV ABDSP SR78 to S2 Alternative has the potential to disrupt existing collocated utility lines during underground construction. After probing within the street or street shoulder, a route for the alignment within the easement would be defined that does not affect existing utilities. Although there is adequate space in the roadway, because underground line construction involves more construction in close proximity to existing utilities on a mile-per-mile basis than overhead construction, the chances of underground line construction activities causing an accidental utility service interruption are greater than for the overhead segments (north of SR78 and east of S2). Trenching in the public ROW could accidentally damage one or more existing utilities along the alternative underground route. Therefore, there would be potential for service interruptions of these utilities or other underground utilities in Split Mountain Road and SR78 during construction (Class II).

Some service disruptions during construction would be unavoidable at a few locations along the ROW. These disruptions would likely occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. As described above, intentional service interruption during construction could be unavoidable and without notification of the public would significantly hinder activities in the surrounding areas. These impacts are considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

Where the electrical transmission duct bank would cross or run parallel to other substructures that operate at normal soil temperature (gas lines, telephone lines, water mains, storm drains, sewer lines), a minimal radial clearance of 12 and 24 inches would be required, respectively. Ideal clearances would be 2 to 5 feet. Where duct banks cross or run parallel to substructures that operate at temperatures significantly exceeding normal soil temperature (other underground transmission circuits, primary distribution cables, steam lines, heated oil lines), additional radial clearance may be required. Preliminary engineering investigations have not identified any underground utilities that operate at high temperatures. Clearances and depths would meet requirements set forth with Rule 33.4 of CPUC GO-128.

Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §\$4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with the California Government Code §\$4216-4216.9 (see Anza-Borrego Link impact discussion in Section D.14.5 for more detail), CPUC GO-128, and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions; however, accidental disruptions could still occur (especially during the underground segment). This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities).

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

S-2a Notify public of utility service interruption.

S-2b Protect underground utilities.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be identical to the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for the overhead and underground portions of this alternative on a per-mile/structure basis.

Water. Although the alternative would not include removal of the 69 kV and 92 kV poles, there would be a greater amount of ground disturbance with this alternative due to additional underground construction, therefore, water use for dust control would be greater overall. Expansion of the San Felipe Substation may use less water than at the Central East Substation due to less required grading and earthwork, which would need less water for dust control. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). Depletion of local water supplies and wells as a result of project construction is discussed under Impact H-4 (Groundwater dewatering for project construction could deplete local water supplies) in Section D.12. As described in Section D.12, WQ-APM-6 includes a provision that "SDG&E will negotiate with affected landowners to provide alternative water supplies in the event a supply well or springs dry up directly caused by project activities" and the impact is considered to be less than significant. However, this should not be an issue, because like the Proposed Project, water would be obtained from a batch plant at the Central East Substation site that would operate on water supplied by VID wells by way of a temporary pipe system or holding ponds at the substation site. Water use during project construction would be a fraction of the total water supply of VID and would not change its ability to serve the project area demands. Therefore, the water demand for construction of the underground alternative would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the project and/or alternative segments, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. All excavated material within ABDSP would be removed from the site and it would not be spread along the ROW. Unlike the Proposed Project, the existing 69 kV and 92 kV lines would not be removed, resulting in less waste generation. As identified in Table D.14-2 and described above, the project route is served by a variety of waste management agencies and landfills. Due to the number and capacity of landfills serving the project area, capacity for materials generated from construction of the alternative would be available. Because the exact amount of material recycling is unknown, the total amount of waste requiring landfill disposal is unknown. Recycling activities would greatly reduce the quantity of construction-related materials transported to local landfills. The closest landfills would be the Borrego Landfill (2449 Palm Canyon Road) that allows a maximum of 50 tons/day of waste and has a remaining capacity of 459,856 cubic yards and the Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic yards (CIWMB, 2007). Both accept agricultural, construction/demolition, mixed municipal, sludge (biosolids), tires, and wood waste.

As the waste generated by this alternative would occur over a 30-month period and be dispersed among the various landfills serving the entire project route, the daily waste exported off site would be a frac-

tion of the maximum daily throughput for any of the landfills identified in Table D.14-2. Therefore, construction waste generated would not substantially affect the remaining capacities of local landfills to serve local demands. Although impacts to solid waste facilities would not be significant (Class III) and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation for this alternative to ensure that maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Once operational the San Felipe Substation would have similar impacts to the Central East Substation described in Section D.14.5.3.

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III)

The alternative route would be underground through much of the Park and adjacent to Tamarisk Grove Campground, therefore, once construction activities are completed there would be negligible operational effect on revenues in the Park and Impact S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments) would not occur.

Future Transmission System Expansion. It should be noted that with this alternative there is the possibility that as many as four additional 230 kV circuits and one 500 kV circuit would be constructed through the Park in the future. There is the possibility that some or all of these circuits would be underground in roadways, as the duct bank for the SRPL project could include extra space for future cables or be consolidated enough to fit a similar duct bank on the other side of the roadway for future phases (see the description in Appendix 1, Section 4.3.1). If two duct banks were installed at the sides of the road, one for the Partial Underground 230 kV ABDSP SR78 to S2 Alternative and one for future circuits (as opposed to one big duct bank in the middle of the roadway), one duct bank would be built now and the second one could be added at a future time. If the lines are underground then operational effect on Park revenues would be negligible and Impact S-1 would not occur.

In the event that the final two circuits are required, it may be possible to route the line underground north through Borrego Springs, eliminating the operational effect of Impact S-1. In the event that the lines would be overhead, the impact would be similar to that discussed under Operational Impacts for the Anza-Borrego Link of the Proposed Project above. Visitors generally travel to ABDSP to enjoy the wildflower blooms and the habitat, which would still draw visitors despite presence of the transmission line. It is speculative to say that there would be a decrease in visitors to the Park and even more speculative to extrapolate that indirect tourism industry revenues, purchases at the Visitors' Center or contributions to ABFI would decrease. All of the revenue generated by ABDSP itself (see Table D.14-9) goes into

the State's General Fund, and therefore, any change in money generated at the Park would be only a fraction of the total State budget and it would not impact the Park's distribution for the following year. Once constructed, the short-term construction disturbances would no longer occur. Therefore, this impact would be less than significant (Class III) and no mitigation measure is required.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance for the overhead portions of this alternative along SR78 and S2, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be trucked to the individual structures; however, compared to water usage during project construction, water for washing would be minor, and impacts on existing resources and suppliers would be less than significant (Class III).

Because the majority of this alternative would be located in existing roadways through ABDSP (Old Kane Springs Road and SR78), any new access and spur roads at the western end of the Park would not require additional service requirements due to their proximity to and visibility from existing roads and the short length of the mile-long overhead segment. This impact would be less than significant (Class III) and no mitigation measure is required.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route in the areas of this alternative that would be outside of ABDSP (local tax revenues do not accrue on State or federal land). However, as discussed for the Proposed Project, BLM and ABDSP do collect fees annually for ROW Grants.

The alternative would not result in an adverse change in public resource revenue. Furthermore, the Partial Underground 230 kV ABDSP SR78 to S2 Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Partial Underground 230 kV ABDSP SR78 to S2 Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the Proposed Project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, the discussion of Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities such as transmission lines in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects.

Most of this alternative would be underground, eliminating visual impacts; however, it would create a new overhead corridor on the east side of S2 heading up the scenic and most undeveloped Earthquake Valley. In addition to undeveloped private land, the following developed residences would be located within 1,000 feet of the alternative route and San Felipe Substation:

• MP SR 0 to MP SR 4. A total of 65 residences are located along Old Kane Springs Road and Split Mountain Road in Ocotillo Wells.

- MP SR 4 to MP SR 8. A total of 35 residences are located along SR78, east of ABDSP, in Ocotillo Wells.
- MP SR 18 to MP SR 19. One park ranger residence is located on S3 north of the Tamarisk Grove Campground in ABDSP.
- MP SR 34 to MP SR 38.1. A total of 13 residences are located along S2 in Ranchita/Warner Springs.

Although there would be significant and unmitigable (Class I) impacts to visual resources, as discussed in Section D.14.5.1, numerous studies conclude that any property value effects are usually smaller than anticipated and essentially impossible to generally quantify due to the individuality of properties/neighborhoods, differences in personal preferences of individual buyers/sellers, and the weight of other factors that contribute to a person's decision to purchase a property. Other factors (e.g., neighborhood factors, square footage, size of lot, irrigation potential) are much more likely than overhead transmission lines to be major determinants of the sales price of property (Kroll and Priestley, 1992). In addition, across the board, studies have generally concluded that over time any adverse property value impacts diminish and within five years the change is negligible. As a result, any changes in property values would not be a substantial decrease and this impact is considered to be less than significant (Class III). Although not required, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would help to reduce the visual impacts of the project, which is one of the components perceived to affect property values.

San Felipe Substation

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Anza-Borrego Link, which is described in Section D.14.2.2. Public services construction requirements would be similar to the proposed Central East Substation, except less grading would be required, and likewise impacts would also be similar (see Section D.14.7).

All Underground Option

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Anza-Borrego and Central Links, which are described in Section D.14.2.2 and D.14.2.3.

Impacts would be similar to the Partial Underground 230 kV ABDSP SR78 to S2 Alternative, except the additional underground construction would cause slightly greater ground disturbance and thus would require more water for dust control (Impact S-3) and there would be a slightly greater potential for accidental disruption of existing utilities in roadways (Impact S-2). Water use during project construction would be a fraction of the total water supply of VID and would not change its ability to serve the project area demands. Underground construction would occur in the same roadways as the Partial Underground Alternative and existing utilities would be identified with notification of Underground Service Alternative (PSU-APM-2). In addition, Mitigation Measures S-3a (Recycle construction waste) and S-3b (Use reclaimed water), as well as S-2a (Notify public of utility service interruption) and S-2b (Protect underground utilities), would ensure that this incremental increase in underground construction would be reduced to a less than significant level for Impacts S-3 and S-2, respectively.

Because the overhead 230 kV line would be placed underground in SR78 and S2 for an additional approximately 10 miles, the route would be moved off of private properties and all visual impacts

would be eliminated. As a result, Impact S-5 (Presence of the project would decrease property values) would be further reduced to residences along S2. In addition, the route would not directly impact designated Wilderness in ABDSP and it would be entirely underground through the Park (one additional mile of construction in ABDSP). Therefore, the operational effect on revenues in the Park and Impact S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments) would not occur.

D.14.15.2 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

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Anza-Borrego Link, which is described in Section D.14.2.2, because this alternative would primarily follow the proposed corridor.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class I for revenues, Class IV for economic benefits)

Revenue from Business Operations. This alternative is located within Anza Borrego Desert State Park. As previously described, disturbance to recreational activities may temporarily reduce access and visitation to portions of ABDSP, resulting in potentially significant impacts to businesses related to the tourism industry within ABDSP. As discussed for Impact S-1 under the Anza-Borrego Link for the Proposed Project above, Park revenues would not affect the Park's distribution from the State's General Fund for the following year; however, the recreational impacts from project construction would result in a potentially significant impacts to businesses related to the tourism industry and at the ABFI Visitors' Center.

These issues and potential impacts that would reduce visits are analyzed extensively in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.5 (Wilderness and Recreation), D.8 (Noise), and D.9 (Transportation and Traffic). Implementation of Mitigation Measures WR-1a (Coordinate construction schedule and activities with the authorized officer for the recreation area), WR-1b (Provide temporary detours for trail users), WR-1c (Coordinate with local agencies to identify alternative recreation areas) in Section D.5 (Wilderness and Recreation) would minimize construction-related impacts to ABDSP.

By reducing impacts that would affect the recreational experience, it would thereby also reduce impacts on the related tourism industry. With the implementation of measures, such as those that would coordinate the construction schedule recommend detours, associated local business revenue impacts would be reduced. Nonetheless, a complete overlap of the alternative's construction schedule and tourist season for ABDSP would cause a reduction in visitation and access to recreation and wilderness areas, resulting in a significant and unmitigable impact to Wilderness and Recreation (see Impact WR-1 in Section D.5). Likewise, this impact would result in significant and unmitigable impacts to businesses related to the tourism industry and at the ABFI Visitors' Center (Class I).

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services outside of ABDSP. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties within the geographic scope of the project. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Mitigation Measure for Impact S-1: Project construction and/or transmission line presence would cause a substantial change in revenue for businesses

- WR-1a Coordinate construction schedule and activities with the authorized officer for the recreation area.
- WR-1b Provide temporary detours for trail users.
- WR-1c Coordinate with local agencies to identify alternative recreation areas.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II for East of Tamarisk Grove Campground Option, Class III)

Construction of tower foundations would not be within any roadways, thereby avoiding any utilities in roads. However, the alternative route would underbuild the existing 69 kV and 92 kV lines and pass by the Narrows Substation causing the potential for an existing utility disruption in the event of an accident. Installation of new towers and circuits would occur with the existing system in service. The cut-over would involve a switching maneuver that would interrupt service momentarily. Electrical systems are designed with redundant means to provide service. If it is necessary to take a particular circuit out of service, SDG&E would first ensure that a redundant feed is available.

Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Although accidental disruptions could occur, compliance with California Government Code §§4216-4216.9 (see Anza–Borrego Link impact discussion in Section D.14.5 for more detail) and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions. Therefore, potential impacts related to a collocation accident or utility disruption would be less than significant (Class III). No mitigation measure is required.

East of Tamarisk Grove Campground 150-Foot Option. The East of Tamarisk Grove Campground 150-Foot Option would include underground construction in SR78, which would increase the chance of disrupting existing buried utilities. Compliance with California Government Code §§4216-4216.9 and APMs would reduce the likelihood of accidental disruptions; however, accidental disruptions could still occur

(especially during the underground segment). This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities). In addition some service disruptions during construction could be unavoidable at a few locations along the alternative. These disruptions would potentially occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (East of Tamarisk Grove Campground Option only)

- S-2a Notify public of utility service interruption.
- S-2b Protect underground utilities.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for the overhead and underground (for the East of Tamarisk Grove Campground 150-Foot Option) portions of this alternative on a per-mile/structure basis.

Water. Water usage would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). Depletion of local water supplies and wells as a result of project construction is discussed under Impact H-4 (Groundwater dewatering for project construction could deplete local water supplies) in Section D.12. WQ-APM-6 includes a provision that "SDG&E will negotiate with affected landowners to provide alternative water supplies in the event a supply well or springs dry up directly caused by project activities." However, this should not be an issue, because like the Proposed Project, water would be obtained from a batch plant at the Central East Substation site that would operate on water supplied by VID wells by way of a temporary pipe system or holding ponds at the substation site. Water use during project construction would be a fraction of the total water supply of VID and would not change its ability to serve the project area demands. In addition to adequate supply, for this contract to occur VID would likely determine that it would not effect its ability to serve customer demands. Therefore, the water demand for construction of the alternative would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the project and/or alternative segments, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Like the Proposed Project, the Overhead in Existing ROW Alternative would include the removal of five wood H-frame and 276 wood poles from the existing 69 kV and 92 kV transmission lines that would be underbuilt as part of the alternative. As described in Section B.4.89 (Removal of Facilities and Waste Disposal), the conductor would be coiled and hauled off-site to a recycling facility. Existing wood poles would be cut at ground level, leaving the embedded portion in place. The wood poles, insulators, cross arms and all other associated hardware would be disposed of at an approved off-site location. There would also be waste generated from roadway material during trenching for underground construction in SR78 and S2. The closest landfills would be the Borrego Landfill (2449 Palm Canyon Road) that allows a maximum of 50 tons/day of waste and has a remaining capacity of 459,856 cubic

yards and the Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic yards (CIWMB, 2007). Both accept agricultural, construction/demolition, mixed municipal, sludge (biosolids), tires, and wood waste.

As the waste generated by this alternative would occur over a 30-month period and be dispersed among the various landfills serving the entire project route, the daily waste exported off site would be a fraction of the maximum daily throughput for any of the landfills identified in Table D.14-2. Therefore, construction waste generated would not substantially affect the remaining capacities of local landfills to serve local demands. Although impacts to solid waste facilities would not be significant (Class III) and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation for this alternative to ensure that maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III)

All of the revenue generated by ABDSP itself (see Table D.14-9) goes into the State's General Fund, and therefore, any change in money generated at the Park would be only a fraction of the total State budget and it would not impact the Park's distribution for the following year.

Although there would be a significant and unmitigable impact to Wilderness and Recreation (see Impact WR-2 [Presence of a transmission line or substation would permanently change the character of a recreation area, diminishing its recreational value] in Section D.5), visitors generally travel to ABDSP to enjoy the wildflower blooms and the habitat, which would still draw visitors despite presence of the transmission line and significant diminishment of the recreational experience in areas of the Park once the short-term construction disturbances (especially due to noise, traffic, and visual resources) are completed. Visitors may also visit other areas of the Park where there are no transmission lines. It is possible that the presence of the new transmission line would result in a decrease in visitors to the Park, as discussed in Section D.5.6 (Wilderness and Recreation). However, it would be speculative to extrapolate that indirect tourism industry revenues, purchases at the Visitors' Center or contributions to ABFI would decrease. Therefore, this impact would be less than significant (Class III) and no mitigation measure is required.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Water. During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be trucked to the individual structures; however, compared to water usage during project construction, water for washing would be minor and impacts on existing resources and suppliers would be less than significant (Class III).

Increased Patrol. Construction of the Overhead 500 kV ABDSP within Existing ROW Alternative would require the construction of additional vehicle roads in the Park and the construction of spur roads to each tower location. These roads would create new points of access to the public in areas that have extremely sensitive natural and cultural resources. Additional patrol of these areas would be required to protect these resources and provide public safety for likely increased public use of areas accessible via the spur roads. The presence of the transmission line, including the substantial number of spur roads, may increase the need for law enforcement and public safety services as visitors, both on foot and in vehicles, would be able to make use of the spur roads. However, this alternative would follow the existing ROW (except east of Tamarisk Grove Campground with the option), all of the new roads would be generally parallel to and/or nearby existing roads (Old Kane Springs Road, SR78, and Grapevine Canyon Road) and given the low vegetation in the Park, these newly accessible areas would be visible from patrol on existing roadways. The overall area of the Park would not increase. Therefore, this impact would be less than significant (Class III). However, to further ensure that adequate law enforcement and safety personnel are available within ABDSP, Mitigation Measure S-3c is recommended, but not required. Please see the explanation of mitigation for less than significant impacts in Section D.1.5.1.

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3c Ensure adequate law enforcement and safety personnel.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

BLM and ABDSP would receive no revenue from the installation of the Proposed Project on BLM or State lands, because local tax revenues do not accrue on federal or State lands. However, BLM does collect fees annually for ROW Grants. In addition, although ABDSP has not yet determined an exact fee, at minimum, there would likely be a payment for the appraised value of the land itself. These fees are discussed under Impact S-4 for the Anza-Borrego Link of the proposed route.

As a result, the alternative would not result in an adverse change in public resource revenue. Furthermore, the route would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are required.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the Proposed Project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, the discussion of Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities such as

transmission lines in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects. As also discussed in Section D.14.5.1, any changes in property values would not be a substantial decrease and this impact is considered to be less than significant (Class III). Although not required because the impact is less than significant, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would help to reduce the visual impacts of the project, which is one of the components perceived to affect property values.

D.14.16 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.

From an operational perspective, presence of the transmission line and associated facilities would not disrupt actual use of business properties or structures for any of the alternatives in the Central Link. Access to all businesses would be fully restored once construction of the project is complete. The transmission line would be located near business properties, especially around the town of Santa Ysabel, but it would not remove any businesses along the route or cause any use to change. In light of the aforementioned reasons, no business-related impacts would occur and there would be no substantial change in revenues during operation (Impact S-1). This operational impact is not discussed under each alternative.

Increased demands on emergency services would occur if operation of an alternative would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in greater detail in Section D.15 (Fire and Fuels Management) and is not addressed in this section. There is also the potential for a socioeconomic effect on local communities and other values at risk as a result of fire hazard, because a project-related fire or a fire that grows larger as a result of the presence of the project would have a significant effect on local communities far surpassing the cost of suppressing the fire. Cost of fire suppression is also discussed in Section D.15 (Fire and Fuels Management) and is not addressed here.

D.14.16.1 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

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Central Link, which is described in Section D.14.2.3.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III for revenues, Class IV for economic benefits)

Revenue from Business Operations. Business uses occur along the route, but the alternative would not require the removal or relocation of any business uses. Impacts on local businesses would result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Transportation and Traffic), and D.10 (Public Health and Safety). Where project short-term construction impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts during construction would not be significant. In addition, because these impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

Construction of tower foundations would not be within any roadways, thereby avoiding any utilities in roads. However, the alternative route would parallel the existing SDG&E 69 kV line for its length causing the potential for an existing utility disruption in the event of an accident. Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Although accidental disruptions could occur, compliance with the California Government Code §§4216-4216.9 (see Anza-Borrego Link impact discussion in Section D.14.5 for more detail) and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions. Therefore, potential impacts related to a collocation accident or utility disruption would be less than significant (Class III). No mitigation measure is required.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for this alternative on a per-mile/structure basis.

Water. An average of 27,000 gallons per day of water would be used for dust control and 36 gallons/ yard³ of water would be used for tower construction. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). As discussed in Section D.14.2.3 for the Central Link of the Proposed Project, water would be trucked into the area and it would be a comparatively small fraction of the total water supply for VID, not changing its ability to serve the project area demands (VID, 2007a). Therefore, the water demand for construction of the alternative would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the project and/or alternative segments, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Approximately 25 percent of excavated material would be clean and dry and would be spread along the ROW. No structures would be removed and the 69 kV line would remain in place. The closest landfill would be the Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic yards (CIWMB, 2007). It accepts agricultural, construction/demolition, mixed municipal, sludge (biosolids), tires, and wood waste. There would be adequate water supply and landfill capacity, because construction of this alternative would represent a fraction of the overall public service requirements of the Proposed Project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur. The full text of the mitigation measures can be found in Appendix 12.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be trucked to the individual structures; however, this facility would be owned by SDG&E and compared to

water usage during project construction, water for washing would be minor and impacts on existing resources and suppliers would be less than significant (Class III).

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route. The alternative would not result in an adverse change in public resource revenue. Furthermore, the Santa Ysabel Existing ROW Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Santa Ysabel Existing ROW Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the Proposed Project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, the discussion of Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities such as transmission lines in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects. As also discussed in Section D.14.5.1, any changes in property values would not be a substantial decrease and this impact is considered to be less than significant (Class III). Although not required because the impact is less than significant, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would help to reduce the visual impacts of the project, which is one of the components perceived to affect property values.

D.14.16.2 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

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Central Link, which is described in Section D.14.2.3.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III for revenue, Class IV for economic benefits)

Revenue from Business Operations. Business uses occur along the route, but the alternative would not require the removal or relocation of any business uses. Impacts on local businesses would result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). In addition, underground construction in SR79 would cause traffic impacts to visitors of the newly opened Santa Ysabel Resort and Casino. These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Transportation and Traffic), and D.10 (Public Health and Safety). Where project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Construction of the Santa Ysabel Partial Underground Alternative has the potential to disrupt existing collocated utility lines during underground construction. After probing within the street or street shoulder, a route for the alignment within the easement would be defined that does not affect existing utilities. Although there is adequate space in the roadway, because underground line construction involves more construction in close proximity to existing utilities on a mile-per-mile basis than overhead construction, the chances of underground line construction activities causing an accidental utility service interruption are greater than for overhead construction. Trenching in the public ROW could accidentally damage one or more existing utilities along the proposed underground route. Therefore, there would be potential for service interruptions of these utilities or other underground utilities in Mesa Grande Road and SR79 during construction.

Some service disruptions during construction would be unavoidable at a few locations along the alternative. These disruptions would have the potential to occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. As described above, intentional service interruption during construction could be unavoidable and without notification of the public would significantly hinder activities in the surrounding areas. These impacts

are considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

Where the electrical transmission duct bank would cross or run parallel to other substructures that operate at normal soil temperature (gas lines, telephone lines, water mains, storm drains, sewer lines), a minimal radial clearance of 12 and 24 inches would be required, respectively. Ideal clearances would be 2 to 5 feet. Where duct banks cross or run parallel to substructures that operate at temperatures significantly exceeding normal soil temperature (other underground transmission circuits, primary distribution cables, steam lines, heated oil lines), additional radial clearance may be required. Preliminary engineering investigations have not identified any underground utilities that operate at high temperatures. Clearances and depths would meet requirements set forth with Rule 33.4 of CPUC GO-128.

Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §\$4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §\$4216-4216.9 (see Anza-Borrego Link impact discussion in Section D.14.5 for more detail), CPUC GO-128, and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions; however, accidental disruptions could still occur (especially during the underground segment). This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities).

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

- S-2a Notify public of utility service interruption.
- S-2b Protect underground utilities.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be identical to the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for this alternative on a permile/structure basis for underground construction.

Water. An average of 27,000 gallons per day of water would be used for dust control. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). As discussed in Section D.14.2.3 for the Central Link of the Proposed Project, water would be trucked into the area and it would be a comparatively small fraction of the total water supply for VID, and would not change its ability to serve the project area demands (VID, 2007a). Therefore, the water demand for construction of the alternative would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the project and/or alternative segments, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Approximately 25 percent of excavated material would be clean and dry and would be spread along the ROW. No structures would be removed and the 69 kV line would remain in place. The closest landfill would be the Ramona Landfill (20630 Pamo Road) that allows a maximum of 295

tons/day and has a remaining capacity of 690,000 cubic yards (CIWMB, 2007). It accepts agricultural, construction/demolition, mixed municipal, sludge (biosolids), tires, and wood waste. There would be adequate water supply and landfill capacity, because construction of this alternative would represent a fraction of the overall public service requirements of the Proposed Project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-3 (Project construction and operation would increase the need for public services and facilities) would not occur because this alternative would be entirely underground and no insulator washing would be necessary.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route. The alternative would not result in an adverse change in public resource revenue. Furthermore, the Santa Ysabel Partial Underground Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Santa Ysabel Partial Underground Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

This route would be entirely underground in Mesa Grande Road and SR79, and therefore, potential property value changes resulting from visual impacts would be avoided and any decrease in property values would be less than significant (Class III).

D.14.16.3 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 cut across open space to enter SR79. The route would be in SR79 through the Santa Ysabel Valley, rejoining the proposed route south of SR78.

Environmental Setting

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Central Link, which is described in Section D.14.2.3.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class II for agricultural revenue, Class III for business revenue, Class IV for economic benefits)

Revenue from Business Operations. Business uses occur along the route, but the alternative would not require the removal or relocation of any business uses. Impacts on local businesses would result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). There would be increased traffic impacts to visitors of the new Santa Ysabel Resort and Casino along SR79. These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Transportation and Traffic), and D.10 (Public Health and Safety). Where short-term project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Revenue from Agricultural Operations. As discussed in Section D.6 (Agricultural Resources), DOC Farmland and Williamson Act lands would be significantly impacted by construction activities (more than 10 acres of each) (Class II). This would involve the construction and/or expansion of access roads, the installation of tower structures and wires, and the presence/staging of construction equipment and vehicles. Because no impacts to Active Agricultural Operations would occur within this alternative length and with incorporation of APMs and mitigation impacts would be reduced and farmers would be compensated for any significant crop losses, any associated impacts to crop and/or grazing revenues would be less than significant. Therefore, no additional mitigation measures are recommended outside of those presented in Section D.6 (Agricultural Resources) and listed below to mitigate potential impacts that would result in a substantial change to local agricultural revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Mitigation Measures for Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments

- AG-1a Avoid interference with agricultural operations.
- AG-1c Coordinate with grazing operators.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Construction of the Santa Ysabel All Underground Alternative has the potential to disrupt existing collocated utility lines during underground construction. After probing within the street or street shoulder, a route for the alignment within the easement would be defined that does not affect existing utilities. Although there is adequate space in the roadway, because underground line construction involves more construction in close proximity to existing utilities on a mile-per-mile basis than overhead construction, the chances of underground line construction activities causing an accidental utility service interruption are greater than for overhead construction. Trenching in the public ROW could accidentally damage one or more existing utilities along the proposed underground route. Therefore, there would be potential for service interruptions of these utilities or other underground utilities in SR79 during construction.

Some service disruptions during construction would be unavoidable at a few locations along the alternative. These disruptions would occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. As described above, intentional service interruption during construction would be unavoidable and without notification of the public would significantly hinder activities in the surrounding areas. These impacts are considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

Where the electrical transmission duct bank would cross or run parallel to other substructures that operate at normal soil temperature (gas lines, telephone lines, water mains, storm drains, sewer lines), a minimal radial clearance of 12 and 24 inches would be required, respectively. Ideal clearances would be 2 to 5 feet. Where duct banks cross or run parallel to substructures that operate at temperatures significantly exceeding normal soil temperature (other underground transmission circuits, primary distribution cables, steam lines, heated oil lines), additional radial clearance may be required. Preliminary engineering investigations have not identified any underground utilities that operate at high temperatures. Clearances and depths would meet requirements set forth with Rule 33.4 of CPUC GO-128.

Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §\$4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §\$4216-4216.9 (see Anza-Borrego Link impact discussion in Section D.14.5 for more detail), CPUC GO-128, and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions; however, accidental disruptions could still occur (especially during the underground segment). This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities).

Agricultural Lands. On off-road agricultural lands, there is the potential to accidentally disrupt underground irrigation pipes during excavation or other ground disturbing construction activities (Class II). However, Mitigation Measure AG-1a (Avoid interference with agricultural operations) specifies that SDG&E must coordinate with property owners and tenants to ensure that project construction will be conducted so as to avoid interference with agricultural operations. Implementation of Mitigation Measure AG-1a would reduce impacts to Active Agricultural Operations and disruption to existing agricultural irrigation systems to less than significant levels.

Mitigation Measure for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

AG-1a Avoid interference with agricultural operations.

S-2a Notify public of utility service interruption.

S-2b Protect underground utilities.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for this alternative on a per-mile/structure basis for overhead and underground construction.

Water. An average of 27,000 gallons per day of water would be used for dust control and 36 gallons/yard³ of water would be used for tower construction. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). As discussed in Section D.14.2.3 for the Central Link of the Proposed Project, water would be trucked into the area and it would be a comparatively small fraction of the total water supply for VID, not changing its ability to serve the project area demands (VID, 2007a). Therefore, the water demand for construction of the alternative would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the project and/or alternative segments, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Approximately 25 percent of excavated material would be clean and dry and would be spread along the ROW. No structures would be removed and the 69 kV line would remain in place. The closest landfill would be the Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic yards (CIWMB, 2007). It accepts agricultural, construction/demolition, mixed municipal, sludge (biosolids), tires, and wood waste. There would be adequate water supply and landfill capacity, because construction of this alternative would represent a fraction of the overall public service requirements of the Proposed Project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be trucked to the individual structures; however, this facility would be owned by SDG&E and compared to water usage during project construction, water for washing would be minor and impacts on existing resources and suppliers would be less than significant (Class III).

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route. The alternative would not result in an adverse change in public resource revenue. Furthermore, the Santa Ysabel SR79 All Underground Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Santa Ysabel SR79 All Underground Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

This route would be primarily underground and therefore, potential property value changes resulting from visual impacts would be avoided in this segment. The overhead segment, while on private property, would be removed from built structures and would be largely adjacent to an existing 69 kV and telephone ROW creating an incremental impact, which would be even smaller than that of a new corridor. Therefore, as discussed in Section D.14.5.1, any decrease in property values would be less than significant (Class III).

D.14.16.4 SDG&E Mesa Grande Alternative

This alternative to a one-mile portion of the proposed overhead 230 kV route was proposed by the land-owner 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

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Central Link, which is described in Section D.14.2.3.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class II for agricultural revenue, Class III for business revenue, Class IV for economic benefits)

No businesses are located in the vicinity of this alternative segment.

Revenue from Agricultural Operations. Construction of new 230 kV towers would require construction equipment to traverse agricultural grazing land. This would temporarily restrict crop production or damage crops if activities occurred during the growing season. The restriction of crop production or damage to crops would decrease revenues for the agricultural landowners whose crops would be affected by project activities (Class II). As discussed in Section D.6 (Agricultural Resources), land under active agricultural operation would be impacted by construction activities, a portion of which would be permanent. This would involve the construction and/or expansion of access roads, the installation of tower structures and wires, and the presence/staging of construction equipment and vehicles. Because impacts to Active Agricultural Operations would be less than significant with incorporation of APMs and mitigation and farmers would be compensated for any significant crop losses, any associated impacts to crop and/or dairy revenues would be less than significant. Therefore, no additional mitigation measures are recommended outside of those presented in Section D.6 (Agricultural Resources) to mitigate potential impacts that would result in a substantial change to local agricultural revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Mitigation Measures for Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments

- AG-1a Avoid interference with agricultural operations.
- **AG-1c** Coordinate with grazing operators.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

Construction of tower foundations would not be within any roadways, thereby avoiding any utilities in roads. The alternative would not parallel or cross any existing transmission lines or major utilities and it would not be located on irrigated cropland. Therefore, the potential for a collocation accident is low and the impact would be less than significant (Class III).

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for this alternative on a per-mile/structure basis for overhead construction.

Water. An average of 27,000 gallons per day of water would be used for dust control. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). As discussed in Section D.14.2.3 for the Central Link of the Proposed Project, water would be trucked into the area and it would be a comparatively small fraction of the total water supply for VID, not changing its ability to serve the project area demands (VID, 2007a). Therefore, the water demand for construction of this short alternative would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the project and/or alternative segments, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Approximately 25 percent of excavated material would be clean and dry and would be spread along the ROW. The closest landfill would be the Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic yards (CIWMB, 2007). It accepts agricultural, construction/demolition, mixed municipal, sludge (biosolids), tires, and wood waste. There would be adequate water supply and landfill capacity, because construction of this alternative would represent a fraction of the overall public service requirements of the Proposed Project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be trucked to the individual structures; however, this facility would be owned by SDG&E and compared to water usage during project construction and overall supply, water for washing would be minor and impacts on existing resources and suppliers would be less than significant (Class III).

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route. The alternative would not result in an adverse change in public resource revenue. Furthermore, the Mesa Grande Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Mesa Grande Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

During the public scoping process for the Proposed Project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, the discussion of Impact S-5 under the Imperial Valley Link (see Section D.14.5.1) addresses in detail the issues associated with the potential for impacts on property values and industrial facilities such as transmission lines in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects. As also discussed in Section D.14.5.1, any changes in property values would not be a substantial decrease and this impact is considered to be less than significant (Class III). Although not required because the impact is less than significant, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would help to reduce the visual impacts of the project, which is one of the components perceived to affect property values.

D.14.17 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.

From an operational perspective, presence of the transmission line and associated facilities would not disrupt actual use of business properties or structures for any of the alternatives in the Inland Valley Link. Access to all businesses would be fully restored once construction of the project is complete. The transmission line would be located near business properties, but it would not remove any businesses along the route or cause any use to change. In light of the aforementioned reasons, no business-related impacts would occur and there would be no substantial change in revenues during operation (Impact S-1). This operational impact is not discussed under each alternative.

Increased demands on emergency services would occur if operation of an alternative would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in greater detail in Section D.15 (Fire and Fuels Management) and is not addressed in this section. There is also the potential for a socioeconomic effect on local communities and other values at risk as a result of fire hazard, because a project-related fire or a fire that grows larger as a result of the presence of the project would have a significant effect on local communities far surpassing the cost of suppressing the fire. Cost of fire suppression is also discussed in Section D.15 (Fire and Fuels Management) and is not addressed here.

D.14.17.1 CNF Existing 69 kV Route Alternative

This 0.5-mile alternative segment would start at MP 111.5 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 112.5. 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

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Inland Valley Link, which is described in Section D.14.2.4.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III for revenue, Class IV for economic benefits)

Revenue from Business Operations. Business uses nearby on SR78, but the CNF Alternative would not require the removal or relocation of any business uses. Impacts on local businesses would result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Transportation and Traffic), and D.10 (Public Health and Safety). Where project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, the impacts would be short-term construction impacts that have been found to not be significant and there are no CNF campgrounds or recreation facilities in the vicinity of the alternative that would be disturbed (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

Construction of tower foundations would not be within any roadways, thereby avoiding any utilities in roads. However, the alternative route would parallel the existing SDG&E 69 kV line for its length causing the potential for an existing utility disruption in the event of an accident. Under PSU-APM-1,

SDG&E would coordinate with all utility providers with facilities located within or adjacent to the Project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Although accidental disruptions could occur, compliance with California Government Code §§4216-4216.9 (see Anza-Borrego Link impact discussion in Section D.14.5 for more detail) and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions. Therefore, potential impacts related to a collocation accident or utility disruption would be less than significant (Class III). No mitigation measure is required.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for this alternative on a per-mile/structure basis for overhead construction. Existing access roads for the 69 kV line would be used for the alternative route.

Water. An average of 27,000 gallons per day of water would be used for dust control and 36 gallons/ yard³ of water would be used for tower construction. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11, Air Quality. This water would be obtained from the Ramona Municipal Water District (see Section D.14.8). Water use during construction of this short alternative would be a comparatively small fraction of its total water supply and would not change the ability of the Ramona Municipal Water District (see Section D.14.2.4) in serving the project area demands. Reclaimed water would also be available (Ramona Municipal Water District, 2007). Therefore, the water demand for construction of the alternative route would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended.

SDG&E would have to contract with providers to obtain reclaimed water where it is available, and its use would reduce the amount of potable water needed from local water districts along the Inland Valley Link. With availability for use of soil binders (see Mitigation Measure AQ-1a) and reclaimed water, in addition to nearby districts with available water, in the event that water suppliers are not able to supply the full amount of water required during construction in the summer months for the entire project as a whole in the Inland Valley Link, alternative means of procuring water and/or reducing water usage would be available as not to significantly impact water suppliers (Class III). No mitigation measure is required; however, implementation of Mitigation Measure S-3b (Use reclaimed water), would further reduce impacts on local and regional water supplies by encouraging use of reclaimed water where possible. The full text of the mitigation measures can be found in Appendix 12.

Solid Waste. Approximately 50 percent of excavated material would be clean and dry and would be spread along the ROW. Under this alternative the existing 69 kV line would not be relocated and there would be no structure removal. The closest landfills would be the Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic and the Sycamore Sanitary Landfill (8514 Mast Boulevard) that allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards (CIWMB, 2007). The Ramona Landfill accepts agricultural, construction/demolition, mixed municipal, sludge (biosolids), tires, and wood waste. The Sycamore Sanitary Landfill accepts asbestos, contaminated soil, mixed municipal waste, sludge (biosolids), agricultural, dead animals, tires, shreds, and wood waste (including treated wood). There would be adequate water supply and landfill capacity, because construction of this alternative would represent a fraction of the overall public service requirements of the Proposed Project (see Section D.14.5) or existing facilities

supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

This alternative would be located entirely within CNF. Due to the public ownership of CNF lands traversed by the alternative, Impact S-5 (Presence of the project would decrease property values) would not apply.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day. Water would be trucked to the individual structures from the existing SDG&E Kearny O&M facility; however, this facility would be owned by SDG&E and compared to water usage during project construction and overall supply, water for washing would be minor and impacts on existing resources and the existing SDG&E supply would be less than significant (Class III).

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

CNF would receive no tax revenue from the installation of the project on National Forest lands, because local tax revenues do not accrue on federal lands. However, CNF does collect fees annually for ROW Grants. An annual land use rent is determined from a Linear ROW Fee Schedule (inflation adjusted). The CY 2007 fee for an electric line ROW in San Diego County is \$43.81 per acre of ROW per year (CNF, 2007a). Linear ROW fees go direct to the U.S. Treasury's General Fund. As a result, the CNF Alternative would not result in an adverse change in public resource revenue. Furthermore, the alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Minor increases to public agency revenues as a result of the alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are required.

D.14.17.2 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

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Inland Valley Link, which is described in Section D.14.2.4. Oak Hollow Road is 16 feet wide (asphalt or dirt/gravel), within a 60-foot private road easement. According to Starlight Mountain Estates Owners, there are currently no underground utilities (electric, gas, water, cable, etc.) within, adjacent or near the parts of Oak Hollow Road that would be used in this alternative underground alignment. The service road, which travels east from Tower I92 is a maintained 12-footwide dirt access road for the existing 69 kV lines. Similarly, the service road does not have any underground utilities within it. There are two 12- to 18-inch underground drainage pipes/culverts that would need to be crossed. One is under a paved part of Oak Hollow Road, and the other is under the fenced pasture just east of where the line would join Oak Hollow Road (it runs between the residence and the fenced pasture).

Environmental Impacts and Mitigation Measures

Construction Impact

There are no businesses along this short alternative route, construction would occur primarily in existing roadways, and little or no economic benefit would result from this segment alternative. Therefore, no revenue impacts would occur (Impact S-1).

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Construction of the Oak Hollow Road Underground Alternative has the potential to disrupt existing collocated utility lines, such as the 12- and 18-inch underground drainage pipes/culverts, during underground construction. After probing within the street or street shoulder, a route for the alignment within the easement would be defined that does not affect any existing utilities. Although there is adequate space in the roadway, because underground line construction involves more construction in close proximity to existing utilities on a mile-per-mile basis than overhead construction, the chances of underground line construction activities causing an accidental utility service interruption are greater than for overhead construction. Trenching in the public ROW could accidentally damage one or more existing utilities along the proposed underground route. Therefore, there would be potential for service interruptions of these utilities or other underground utilities in the paved and unpaved portions of Oak Hollow Road and the dirt access road during construction.

Some service disruptions during construction would be unavoidable at a few locations along the alternative. These disruptions could occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. As described above, intentional service interruption during construction would be unavoidable and without notification of the public would significantly hinder activities in the surrounding areas. These impacts are considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

Where the electrical transmission duct bank would cross or run parallel to other substructures that operate at normal soil temperature (gas lines, telephone lines, water mains, storm drains, sewer lines), a minimal radial clearance of 12 and 24 inches would be required, respectively. Ideal clearances would be 2 to 5 feet. Where duct banks cross or run parallel to substructures that operate at temperatures significantly exceeding normal soil temperature (other underground transmission circuits, primary distribution

cables, steam lines, heated oil lines), additional radial clearance may be required. Preliminary engineering investigations have not identified any underground utilities that operate at high temperatures. Clearances and depths would meet requirements set forth with Rule 33.4 of CPUC GO-128.

Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §§4216-4216.9 (see Anza–Borrego Link impact discussion in Section D.14.5 for more detail), GO-128, and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions; however, accidental disruptions could still occur (especially during the underground segment). This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities).

Agricultural Lands. On off-road agricultural lands, there is the potential to accidentally disrupt underground irrigation pipes during excavation or other ground disturbing construction activities (Class II). There is a water pipe between a fenced pasture and a residence at the eastern end of Oak Hollow Road that would be crossed by this alternative route. However, Mitigation Measure AG-2a (Avoid interference with agricultural equipment) specifies that SDG&E must coordinate with property owners and tenants to ensure that project construction will be conducted so as to avoid interference with agricultural operations. Implementation of Mitigation Measure AG-1a would reduce impacts to Active Agricultural Operations and disruption to existing agricultural irrigation systems to less than significant levels.

Mitigation Measure for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

AG-1a Avoid interference with agricultural operations.

S-2a Notify public of utility service interruption.

S-2b Protect underground utilities.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for this alternative on a per-mile/structure basis for underground construction although this alternative would an additional 0.7 miles of underground construction (versus overhead with the Proposed Project).

Water. An average of 27,000 gallons per day of water would be used for dust control. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). This water would be obtained from the Ramona Municipal Water District and/or the City of Poway Public Services. Water use during construction of this short alternative would be a comparatively small fraction of the total water supply for the jurisdictions affected and would not change the ability of these water suppliers (see Section D.14.2.4 and D.14.8) in serving the project area demands. Reclaimed water would also be available (Ramona Municipal Water District, 2007; City of Poway, 2007). SDG&E would have to contract with providers to obtain reclaimed water where it is available, and its use would reduce the amount of potable water needed from local water districts along the Inland Valley Link. With availability for use of soil binders (see Mitigation Measure AQ-1a) and reclaimed water, in addition to nearby districts with available water, in the event that water suppliers

are not able to supply the full amount of water required during construction in the summer months for the entire project as a whole in the Inland Valley Link, alternative means of procuring water and/or reducing water usage would be available as not to significantly impact water suppliers (Class III). No mitigation measure is required; however, implementation of Mitigation Measure S-3b (Use reclaimed water), would further reduce impacts on local and regional water supplies by encouraging use of reclaimed water where possible.

Solid Waste. Approximately 50 percent of excavated material would be clean and dry and would be spread along the ROW. Under this alternative there would be no structure removal. The closest landfills would be the Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic and the Sycamore Sanitary Landfill (8514 Mast Boulevard) that allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards (CIWMB, 2007). The Ramona Landfill accepts agricultural, construction/demolition, mixed municipal, sludge (biosolids), tires, and wood waste. The Sycamore Sanitary Landfill accepts asbestos, contaminated soil, mixed municipal waste, sludge (biosolids), agricultural, dead animals, tires, shreds, and wood waste (including treated wood). There would be adequate water supply and landfill capacity, because construction of this short alternative would represent a fraction of the overall public service requirements of the whole project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-3 would not occur because this alternative would be entirely underground and no insulator washing would be necessary.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route. The alternative would not result in an adverse change in public resource revenue. Furthermore, the Oak Hollow Road Underground Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Oak Hollow Road Underground Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

This route would be entirely underground and therefore, as discussed in Section D.14.5.1, potential property value changes resulting from visual impacts would be avoided and any decrease in property values would be less than significant (Class III).

D.14.17.3 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

Demographics, housing, and public services and utilities providers' information would be the same as the Proposed Project in the Inland Valley Link, which is described in Section D.14.2.4.

Environmental Impacts and Mitigation Measures

Construction Impacts

This short alternative would be entirely on Barnett Ranch Open Space Preserve and would not cross any business or agricultural uses and little or no economic benefit would result from this segment. No revenue impacts would occur (Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments).

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Trenching across Barnett Ranch Open Space Preserve has a low potential to disrupt existing collocated utility lines during underground construction (Class II). The line would also be in proximity to the existing Creelman–Los Coches 69 kV line. Some service disruptions during construction would be unavoidable along the alternative. These disruptions would occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. As described above, intentional service interruption during construction would be unavoidable and without notification of the public would significantly hinder activities in the surrounding areas. These impacts are considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §\$4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §\$4216-4216.9 (see Anza–Borrego Link impact discussion in Section D.14.5 for more detail) and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions; however, accidental disruptions could still occur (especially during the underground segment). This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities).

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

S-2a Notify public of utility service interruption.

S-2b Protect underground utilities.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for this alternative on a per-mile/structure basis for underground construction, although overall this alternative would an additional 2,100 feet of underground construction (versus overhead with the Proposed Project).

Water. An average of 27,000 gallons per day of water would be used for dust control. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AO-1a in Section D.11 (Air Quality). This water would be obtained from the Ramona Municipal Water District and/or the City of Poway Public Services. Water use during construction of this short alternative would be a comparatively small fraction of the total water supply for the jurisdictions affected and would not change the ability of these water suppliers (see Section D.14.2.4 and D.14.8) in serving the project area demands. Reclaimed water would also be available (Ramona Municipal Water District, 2007; City of Poway, 2007). SDG&E would have to contract with providers to obtain reclaimed water where it is available, and its use would reduce the amount of potable water needed from local water districts along the Inland Valley Link. With availability for use of soil binders (see Mitigation Measure AO-1a) and reclaimed water, in addition to nearby districts with available water, in the event that water suppliers are not able to supply the full amount of water required during construction in the summer months for the entire project as a whole in the Inland Valley Link, alternative means of procuring water and/or reducing water usage would be available as not to significantly impact water suppliers (Class III). No mitigation measure is required; however, implementation of Mitigation Measure S-3b (Use reclaimed water), would further reduce impacts on local and regional water supplies by encouraging use of reclaimed water where possible.

Solid Waste. Approximately 50 percent of excavated material would be clean and dry and would be spread along the ROW. Under this alternative there would be no structure removal. The closest landfills would be the Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic and the Sycamore Sanitary Landfill (8514 Mast Boulevard) that allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards (CIWMB, 2007). The Ramona Landfill accepts agricultural, construction/demolition, mixed municipal, sludge (biosolids), tires, and wood waste. The Sycamore Sanitary Landfill accepts asbestos, contaminated soil, mixed municipal waste, sludge (biosolids), agricultural, dead animals, tires, shreds, and wood waste (including treated wood). There would be adequate water supply and landfill capacity, because construction of this short alternative would represent a fraction of the overall public service requirements of the whole project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-3 (Project construction and operation would increase the need for public services and facilities) would not occur because this alternative would be underground and no insulator washing would be necessary.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route. The alternative would not result in an adverse change in public resource revenue. Furthermore, the San Vicente Road Transition Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the San Vicente Road Transition Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

This route would extend the underground route an additional 2,100 feet in Barnett Ranch Open Space Preserve, and therefore, potential property value changes resulting from visual impacts would be avoided and no houses would be located directly adjacent to the transition structure. As discussed in Section D.14.5.1, any decrease in property values would be less than significant (Class III).

D.14.17.4 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

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Inland Valley Link, which is described in Section D.14.2.4.

Environmental Impacts and Mitigation Measures

Construction Impacts

This short alternative would be underground primarily in a private road, would not cross any business or agricultural uses, and little or no economic benefit would result from this segment alternative. Therefore, no revenues would be impacted and Impact S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments) would not occur.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

There may be underground existing utilities in Chuck Wagon Road and the line would also be in proximity to the existing Creelman–Los Coches 69 kV line, crossing under it underground before transitioning overhead on its west side, which creates the potential for accidental disruptions.

Some service disruptions during construction would be unavoidable along the alternative. These disruptions would occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. As described above, intentional service interruption during construction would be unavoidable and without notification of the public would significantly hinder activities in the surrounding areas. These impacts are considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

As described under Impact S-2 for the Proposed Project (see Section D.14.5), under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §\$4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §\$4216-4216.9 (see Anza-Borrego Link impact discussion in Section D.14.5 for more detail) and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions; however, accidental disruptions could still occur (especially during the underground segment). This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities).

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

- S-2a Notify public of utility service interruption.
- S-2b Protect underground utilities.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for this alternative on a per-mile/structure basis for underground and overhead construction.

Water. An average of 27,000 gallons per day of water would be used for dust control and 36 gallons/yard³ of water would be used for tower construction. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). This water would be obtained from the Ramona Municipal Water District and/or the City of Poway Public Services. Water use during construction of this alternative would be a comparatively small amount of the total water supply for the jurisdictions affected and would not change the ability of these water suppliers (see Section D.14.2.4 and Section D.14.8) in serving the project area demands. With availability for use of soil binders (see Mitigation Measure AQ-1a) and reclaimed water, in addition to nearby districts with available water, the water demand for construction of the alternative route would not be a significant impact (Class III) on the regional water supply. No mitigation measure is required; however, implementation of Mitigation Measure S-3b (Use reclaimed water), would further reduce impacts on local and regional water supplies by encouraging use of reclaimed water where possible.

Solid Waste. Approximately 50 percent of excavated material would be clean and dry and would be spread along the ROW. Under this alternative there would be no structure removal. The closest landfills would be the Ramona Landfill (20630 Pamo Road) that allows a maximum of 295 tons/day and has a remaining capacity of 690,000 cubic and the Sycamore Sanitary Landfill (8514 Mast Boulevard) that allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards (CIWMB, 2007). The Ramona Landfill accepts agricultural, construction/demolition, mixed municipal, sludge (biosolids), tires, and wood waste. The Sycamore Sanitary Landfill accepts asbestos, contaminated soil, mixed municipal waste, sludge (biosolids), agricultural, dead animals, tires, shreds, and wood waste (including treated wood). There would be adequate water supply and landfill capacity, because construction of this short alternative would represent a fraction of the overall public service requirements of the whole project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

During operation and maintenance, insulator washing, which would occur a maximum of twice a year, would require 300 gallons of water per structure and 3,000 gallons of water per day (this would only apply to the overhead portion of this alternative). Water would be trucked to the individual structures from the existing SDG&E Kearney O&M facility; however, this facility would be owned by SDG&E and compared to water usage during project construction, water for washing would be minor and impacts on existing resources and suppliers would be less than significant (Class III).

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route. The alternative would not result in an adverse change in public resource revenue. Furthermore, the Chuck Wagon Road Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Chuck Wagon Road Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

This route would be both overhead and underground. Potential property value changes resulting from visual impacts would be avoided in the underground segment. Section D.14.5.1 detailed that for the overhead segment, any changes in property values would also not be a substantial decrease and this impact is considered to be less than significant (Class III). Although not required because the impact is less than significant, it should be noted that implementation of mitigation measures in the Visual Resources section (Section D.3), such as Mitigation Measures V-3a (Reduce visual contrast of towers and conductors) and other visual resources mitigation specific to Key Viewpoints, would help to reduce the visual impacts of the project, which is one of the components perceived to affect property values.

D.14.18 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.

From an operational perspective, presence of the transmission line and associated facilities would not disrupt actual use of business properties or structures for any of the alternatives in the Coastal Link. Access to all businesses would be fully restored once construction of the project is complete. The transmission line would be located near business properties, but it would not remove any businesses along the route or cause any use to change. In light of the aforementioned reasons, no business-related impacts would occur and there would be no substantial change in revenues during operation (Impact S-1). This operational impact is not discussed under each alternative.

Increased demands on emergency services would occur if operation of an alternative would increase the risk of wildland fires. Fire risk related to operation of transmission lines is discussed in greater detail in Section D.15 (Fire and Fuels Management) and is not addressed in this section. There is also the potential for a socioeconomic effect on local communities and other values at risk as a result of fire hazard, because a project-related fire or a fire that grows larger as a result of the presence of the project would have a significant effect on local communities far surpassing the cost of suppressing the fire. Cost of fire suppression is also discussed in Section D.15 (Fire and Fuels Management) and is not addressed here.

D.14.18.1 Pomerado Road to Miramar Area North Alternative

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

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Coastal Link, which is described in Section D.14.2.5. The western overhead portion of this alternative would be within an existing 200-foot SDG&E ROW. There are already a 138 kV line with a vacant circuit, a 230 kV double-circuit line, and a 69 kV line, as well as underground fuel lines and a gas line within the corridor. Existing utilities in the roadways along the underground segment of this alternative are as follows (Cornerstone Engineering, Inc., 2007a):

- Pomerado Road from Legacy Road to I-15. The length of this alignment has light utility congestion. Along some portions of the section north of Spring Canyon Road, segments of the roadway contain no water or sewer. Several sewer and water lines enter the roadway from adjacent subdivisions, run in and along the road for a short distance then exit the roadway to serve another area or join a transmission system beyond the roadway.
- Miramar Road from I-15 to Kearny Villa Road. While most segments of Miramar Road are heavily congested with utilities, this section of the roadway has moderate utility congestion. A relatively complicated water interconnection exists east of Black Mountain Road at the intersection of Kearny Mesa Road. Most of the road ROW is more than 100 feet wide, allowing the roadway to be a major utility corridor.
- Kearny Villa Road from Miramar Road to Black Mountain Road. This segment has moderate utility congestion. A franchise fiber optic line is present along the easterly curb line. Distribution sized facilities exist throughout the roadway cross section and cross the street but sufficient room exists to place a trench in the west side of the roadway.
- Black Mountain Road from Kearny Villa Road to Activity Road. This segment has moderate utility congestion with one water/reclaimed water transmission facility located near the intersection with Kearny Villa Road.
- Activity Road from Black Mountain Road to Camino Ruiz. This segment has light to moderate utility congestion depending on the exact location within the segment. Sewer and water lines enter and exit the roadway for a various distances depending on the service requirements for the adjacent developed land. All wet utility facilities appear to be distribution-sized (6 to 16 inches in diameter). Evidence of franchise utilities, including a privately owned fiber optic line, exists along the northerly curbline of the roadway. There appears to be room along the south side of the road for a trench.
- Camino Ruiz from Black Mountain Road to Miralani Drive. This segment also has light to moderate utility congestion. There does not appear to be sewer in the street, and the water line along the east side is 12 inches per records. There is evidence of franchise utilities, generally along the west side of the road, including a privately owned fiber optic line. There appears to be room along the centerline of the road for a trench.
- Miralani Drive from Camino Ruiz to Arjons Drive. Miralani Drive has light utility congestion.
- Arjons Drive from Miralani Drive to Trade Place. Arjons Drive has light utility congestion.

- Trade Place from Arjons Drive to Camino Santa Fe. Trade Place has light utility congestion.
- Camino Santa Fe to Carroll Road/Carroll Canyon Road to Scranton Road. This segment is relatively long and as such varies in the level of utility congestion in the roadway. In general, the congestion increases from east to west, until approximately Nancy Ridge Drive. East of Nancy Ridge Drive, the alignment is generally light or light to moderately congested with utilities. At El Camino Memorial Park (between Fenton Road to the Park Entry), the 27-inch Carroll Canyon Trunk Sewer and two fiber optic lines enter the roadway right-of-way. Additionally, a water transmission system pressure reducing station and interconnection is located partially in the roadway near Fenton Road. The distribution lines in this area are all larger in diameter due to the intense character of the land use throughout this lower part of Carroll Canyon.

The segment of roadway that crosses Carroll Canyon Creek (between Fenton Road and the El Camino Memorial Park Entry) poses considerable challenges for fitting a utility in the roadway. In addition to the aforementioned utility facilities, the road narrows at this location and an extensive drainage culvert system is present under the roadway to pass the creek flows. Based on information contained in one of the record drawings reviewed, bedrock is shallow at the creek (in line with expectations), and there is minimum cover between the roadway surface and the top of the box culvert. Finally, due to the narrowing of the roadway, several utilities already appear to be at minimum separation distances within the roadway at the creek crossing. This segment would be considered very heavily congested. Some existing facilities may need to be relocated.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III for revenue, Class IV for economic benefits)

Revenue from Business Operations. Business uses occur along the route, but the alternative would not require the removal or relocation of any business uses. Impacts on local businesses would result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Transportation and Traffic), and D.10 (Public Health and Safety). Where project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Construction of the Pomerado Road to Miramar Area North Alternative has the potential to disrupt existing collocated utility lines during both underground and overhead construction. SDG&E's 230 kV ROW currently has three transmission lines and two pipelines. After probing within the street or street shoulder, a route for the alignment within the easement would be defined that does not affect existing utilities. Although there is adequate space in the roadway, because underground line construction involves more construction in close proximity to existing utilities on a mile-per-mile basis than overhead construction, the chances of underground line construction activities causing an accidental utility service interruption are greater than for overhead construction. Trenching in the public ROW could accidentally damage one or more existing utilities along the underground route. Therefore, there would be potential for service interruptions of these utilities or other overhead and underground utilities in any of the roadways along this route.

Depending on how the inclusion of an additional 230 kV circuit is designed for the overhead segment, the existing circuits may be moved to new towers. Installation of new towers and circuits would occur with the existing system in service. The cutover would involve a switching maneuver that would interrupt service momentarily. Electrical systems are designed with redundant means to provide service. If it is necessary to take a particular circuit out of service, SDG&E would first ensure that a redundant feed is available.

Some service disruptions during construction would be unavoidable along the alternative. These disruptions would occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. As described above, intentional service interruption during construction would be unavoidable and without notification of the public would significantly hinder activities in the surrounding areas. These impacts are considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

Where the electrical transmission duct bank would cross or run parallel to other substructures that operate at normal soil temperature (gas lines, telephone lines, water mains, storm drains, sewer lines), a minimal radial clearance of 12 and 24 inches would be required, respectively. Ideal clearances would be 2 to 5 feet. Where duct banks cross or run parallel to substructures that operate at temperatures significantly exceeding normal soil temperature (other underground transmission circuits, primary distribution cables, steam lines, heated oil lines), additional radial clearance may be required. Preliminary engineering investigations have not identified any underground utilities that operate at high temperatures. Clearances and depths would meet requirements set forth with Rule 33.4 of CPUC GO-128.

Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §\$4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §\$4216-4216.9 (see Anza-Borrego Link impact discussion in Section D.14.5 for more detail), CPUC GO-128, and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions; however, accidental disruptions could still occur (especially during the underground segment). This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities). The full text of the mitigation measures can be found in Appendix 12.

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

S-2a Notify public of utility service interruption.

S-2b Protect underground utilities.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for this alternative on a per-mile/structure basis for underground and overhead construction.

Water. An average of 27,000 gallons per day of water would be used for dust control and 36 gallons/yard³ of water would be used for tower construction. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). This water would be obtained from the City of San Diego Water District or other local municipal suppliers, depending on location, and would not change their ability in serving the project area demands. The City of San Diego Water District that has a capacity of 324.2 mgd and supplies an average of 220.45 mgd (City of San Diego, 2007). Therefore, the water demand for construction of the alternative would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the project and/or alternative segments, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Approximately 75 percent of excavated material would be clean and dry and would be spread along the ROW. Under this alternative there would be no structure removal. The closest landfills would be the Sycamore Sanitary Landfill (8514 Mast Boulevard) that allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards and the West Miramar Sanitary Landfill (5180 Convoy Street) that has a maximum permitted throughput of 8,000 tons/day and has a remaining capacity of 13,687,454 cubic yards (CIWMB, 2007). The Sycamore Sanitary Landfill accepts asbestos, contaminated soil, mixed municipal waste, sludge (biosolids), agricultural, dead animals, tires, shreds, and wood waste (including treated wood). The West Miramar Sanitary Landfill accepts construction/ demolition, mixed municipal waste, and tires. There would be adequate water supply and landfill capacity, because construction of this short alternative would represent a fraction of the overall public service requirements of the Proposed Project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

The alternative route would be underground or constructed in an existing corridor, therefore, once construction activities are completed there would be a negligible operational effect on revenues along the route and Impact S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments) would not occur.

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route. The alternative would not result in an adverse change in public resource revenue. Furthermore, the Pomerado Road to Miramar Area North Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Pomerado Road to Miramar Area North Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

This route would be underground or in an existing crowded transmission corridor and therefore, potential property value changes resulting from visual impacts would be avoided in the underground segment and would be incremental in the overhead segment. As discussed in Section D.14.5.1, any decrease in property values would be less than significant (Class III).

D.14.18.2 Los Peñasquitos Canyon Preserve and 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

Demographics, housing, and public services and utilities providers' information would be the same as the Proposed Project in the Coastal Link, which is described in Section D.14.2.5. The Mercy Road and Black Mountain Road have moderate to heavy utility congestion in several areas. Many water, reclaimed water, sewer, and storm drainpipes run along or cross the roads. Near Canyonside Park along Black Mountain Road, there are several areas congested with underground utilities. The Peñasquitos trunk sewer line crosses the road at this location, and several other sewer lines leading from the south connect to it. Many electrical transformers, vaults, and facilities populate the area west of the roadway. A bridge spans Los Peñasquitos Creek about 1,100 feet north of Mercy Road.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III for revenue, Class IV for economic benefits)

Revenue from Business Operations. Business uses occur along the route, but the alternative would not require the removal or relocation of any business uses. Impacts on local businesses would result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Transportation and Traffic), and D.10 (Public Health and Safety). Where project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Construction of the Los Peñasquitos Canyon Preserve and Mercy Road Alternative has the potential to disrupt existing collocated utility lines during underground and overhead construction. After probing within the street or street shoulder, a route for the alignment within the easement would be defined that does not affect existing utilities. Although there is adequate space in the roadway, because underground line construction involves more construction in close proximity to existing utilities on a mile-per-mile basis than overhead construction, the chances of underground line construction activities causing an accidental utility service interruption are greater than for overhead construction. Trenching in the public ROW could accidentally damage one or more existing utilities along the underground route. Therefore, there would be potential for service interruptions of these utilities or other underground utilities in any of the roadways along this route.

Some service disruptions during construction would be unavoidable along the alternative. These disruptions could occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. As described above, intentional service interruption during construction would be unavoidable and without notification of the public would significantly hinder activities in the surrounding areas. These impacts are considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

Where the electrical transmission duct bank would cross or run parallel to other substructures that operate at normal soil temperature (gas lines, telephone lines, water mains, storm drains, sewer lines), a minimal radial clearance of 12 and 24 inches would be required, respectively. Ideal clearances would be 2 to 5 feet. Where duct banks cross or run parallel to substructures that operate at temperatures significantly exceeding normal soil temperature (other underground transmission circuits, primary distribution cables, steam lines, heated oil lines), additional radial clearance may be required. Preliminary engineering investigations have not identified any underground utilities that operate at high temperatures. Clearances and depths would meet requirements set forth with Rule 33.4 of CPUC GO-128.

Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §§4216-4216.9 (see Anza–Borrego Link impact discussion in Section D.14.5 for more detail), GO-128, and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions; however, accidental disruptions could still occur (especially during the underground segment). This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities).

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

- S-2a Notify public of utility service interruption.
- S-2b Protect underground utilities.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for this alternative on a per-mile/structure basis for underground construction.

Water. An average of 27,000 gallons per day of water would be used for dust control. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). This water would be obtained from the City of San Diego Water District, such as the City of San Diego Water District that has a capacity of 324.2 mgd and supplies an average of 220.45 mgd, and it would not change the ability of the water suppliers identified in Tables D.14-4 and D.14-6 and Section D.14.2 in serving the project area demands (City of San Diego, 2007). Therefore, the water demand for construction of the alternative would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water from all of the project and/or alternative segments, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Approximately 75 percent of excavated material would be clean and dry and would be spread along the ROW. Under this alternative there would be no structure removal. The closest landfills would be the Sycamore Sanitary Landfill (8514 Mast Boulevard) that allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards and the West Miramar Sanitary Landfill (5180 Convoy Street) that has a maximum permitted throughput of 8,000 tons/day and has a

remaining capacity of 13,687,454 cubic yards (CIWMB, 2007). The Sycamore Sanitary Landfill accepts asbestos, contaminated soil, mixed municipal waste, sludge (biosolids), agricultural, dead animals, tires, shreds, and wood waste (including treated wood). The West Miramar Sanitary Landfill accepts construction/demolition, mixed municipal waste, and tires. There would be adequate water supply and landfill capacity, because construction of this short alternative would represent a fraction of the overall public service requirements of the Proposed Project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route. The alternative would not result in an adverse change in public resource revenue. Furthermore, the Los Peñasquitos Canyon Preserve and Mercy Road Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Los Peñasquitos Canyon Preserve and Mercy Road Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

This route would be entirely underground and therefore, potential property value changes resulting from visual impacts would be avoided, and as discussed in Section D.14.5.1, any decrease in property values would be less than significant (Class III).

D.14.18.3 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

Demographics, housing, and public services and utilities providers information would be the same as the Proposed Project in the Coastal Link, which is described in Section D.14.2.5. Black Mountain Road from SR56 to Park Village Road has moderate to heavy utility congestion in several areas. Many water, reclaimed water, sewer, and storm drainpipes run along or cross the road. Park Village Road has lighter utility congestion.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III for revenue, Class IV economic benefits)

Revenue from Business Operations. Business uses occur along the route, but the alternative would not require the removal or relocation of any business uses. Impacts on local businesses would result from degradation of views, views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects, or health and safety concerns (such as EMF). These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), D.9 (Transportation and Traffic), and D.10 (Public Health and Safety). Where Proposed Project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, because these impacts would be short-term construction impacts and no removal of businesses would be required, these impacts would not result in significant revenue impacts (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), D.4 (Land Use), and D.10 (Public Health and Safety) to mitigate potential impacts that would result in a substantial change to local business revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class II)

Construction of the Black Mountain to Park Village Road Underground Alternative has the potential to disrupt existing collocated utility lines during underground and overhead construction. After probing within the street or street shoulder, a route for the alignment within the easement would be defined that does not affect existing utilities. Although there is adequate space in the roadway, because underground line construction involves more construction in close proximity to existing utilities on a mile-per-mile basis than overhead construction, the chances of underground line construction activities causing an accidental utility service interruption are greater than for overhead construction. Trenching in the public ROW could accidentally damage one or more existing utilities along the underground route. Therefore, there would be potential for service interruptions of these utilities or other underground utilities in any of the roadways along this route.

Some service disruptions during construction would be unavoidable along the alternative. These disruptions would occur while the transmission line and vaults are installed in the trench and the interrupted utility is reconnected around the new transmission line. As described above, intentional service interruption during construction would be unavoidable and without notification of the public would significantly hinder activities in the surrounding areas. These impacts are considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2a (Notify public of utility service interruption).

Where the electrical transmission duct bank would cross or run parallel to other substructures that operate at normal soil temperature (gas lines, telephone lines, water mains, storm drains, sewer lines), a minimal radial clearance of 12 and 24 inches would be required, respectively. Ideal clearances would be 2 to 5 feet. Where duct banks cross or run parallel to substructures that operate at temperatures significantly exceeding normal soil temperature (other underground transmission circuits, primary distribution cables, steam lines, heated oil lines), additional radial clearance may be required. Preliminary engineering investigations have not identified any underground utilities that operate at high temperatures. Clearances and depths would meet requirements set forth with Rule 33.4 of CPUC GO-128.

Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §\$4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §\$4216-4216.9 (see Anza-Borrego Link impact discussion in Section D.14.5 for more detail), CPUC GO-128, and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions; however, accidental disruptions could still occur (especially during the underground segment). This impact is considered potentially significant, but can be mitigated to less than significant levels (Class II) with the implementation of Mitigation Measure S-2b (Protect underground utilities).

Mitigation Measures for Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident

- S-2a Notify public of utility service interruption.
- S-2b Protect underground utilities.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be the same as for the Proposed Project, water usage, solid waste generation, and public services requirements would be similar for this alternative on a per-mile/structure basis for underground construction.

Water. An average of 27,000 gallons per day of water would be used for dust control. This quantity would be reduced with use of soil binders, as specified in Mitigation Measure AQ-1a in Section D.11 (Air Quality). This water would be obtained from the City of San Diego Water District or other local municipal suppliers, depending on location, and would not change their ability in serving the project area demands. The City of San Diego Water District that has a capacity of 324.2 mgd and supplies an average of 220.45 mgd (City of San Diego, 2007). Therefore, the water demand for construction of the alternative would not be a significant impact (Class III) on the regional water supply, and no mitigation measure is recommended. Although impacts to the regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of water

from all of the project and/or alternative segments, Mitigation Measure S-3b (Use reclaimed water) would be recommended for implementation to reduce water usage for construction.

Solid Waste. Approximately 75 percent of excavated material would be clean and dry and would be spread along the ROW. Under this alternative there would be no structure removal. The closest landfills would be the Sycamore Sanitary Landfill (8514 Mast Boulevard) that allows a maximum of 3,965 tons/day and has a remaining capacity of 47,388,428 cubic yards and the West Miramar Sanitary Landfill (5180 Convoy Street) that has a maximum permitted throughput of 8,000 tons/day and has a remaining capacity of 13,687,454 cubic yards (CIWMB, 2007). The Sycamore Sanitary Landfill accepts asbestos, contaminated soil, mixed municipal waste, sludge (biosolids), agricultural, dead animals, tires, shreds, and wood waste (including treated wood). The West Miramar Sanitary Landfill accepts construction/demolition, mixed municipal waste, and tires. There would be adequate water supply and landfill capacity, because construction of this short alternative would represent a fraction of the overall public service requirements of the Proposed Project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste from all of the individual links, Mitigation Measure S-3a (Recycle construction waste) would be recommended for implementation with this alternative to ensure that maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

Impact S-4: Property tax revenues and/or fees from project presence would substantially benefit public agencies (Class IV)

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. Like with the Proposed Project, SDG&E's property taxes would increase as a result of the alternative route. The alternative would not result in an adverse change in public resource revenue. Furthermore, the Black Mountain to Park Village Road Underground Alternative would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Increases to public agency revenues as a result of the Black Mountain to Park Village Road Underground Alternative are considered a beneficial (Class IV) impact. Therefore, no mitigation measures are recommended.

Impact S-5: Presence of the project would decrease property values (Class III)

This route would be entirely underground and therefore, potential property value changes resulting from visual impacts would be avoided, and as discussed in Section D.14.5.1, any decrease in property values would be less than significant (Class III).

D.14.18.4 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

Demographics, housing, and public services and utilities providers in the vicinity of the existing Sycamore Canyon Substation, the Miguel Substation, the Mission Substation, and the Escondido Substation, and the existing transmission facilities of Sycamore Canyon–Pomerado-Poway and Sycamore Canyon–Chicarita routes and lines between Sycamore Canyon and Mission would be as described in Section D.14.2.5. This alternative would occur within existing SDG&E 69, 138, and 230 kV ROWs and existing substation boundaries.

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact S-1: Project construction and/or transmission line presence would cause a change in revenue for businesses, tribes, or governments (Class III for business revenue, Class IV for economic benefits)

Revenue from Business Operations. Although upgrading the existing transmission lines and substations under the Coastal Link System Upgrade Alternative would occur exclusively within existing SDG&E ROWs, short-term construction activities would still have the potential to cause disturbance to businesses in the substation/ROW vicinities. Impacts on local businesses would result from views of construction equipment and activity, vehicular or pedestrian access restrictions, land use, air quality, and noise effects. These issues are analyzed in this document in Sections D.3 (Visual Resources), D.4 (Land Use), D.8 (Noise), and D.9 (Transportation and Traffic). Where Proposed Project impacts for these issue areas are found to be less than significant or have been mitigated to less than significant levels, any associated loss of local business revenue impacts would not be significant. In addition, most of the impacts would be short-term construction impacts that have been found to not be significant and the upgrades would not involve new activities that would affect revenue for businesses, tribes, or governments (Class III). Therefore, no additional mitigation measures are recommended outside of those presented in Sections D.3 (Visual Resources), D.9 (Transportation and Traffic), and D.4 (Land Use) to mitigate potential impacts that would result in a substantial change to local business revenues.

Economic Benefit. Employment of construction personnel would be beneficial to local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations in Imperial and San Diego Counties, creating new temporary and permanent employment in these counties. A limited number of construction personnel would require temporary housing, likely in local hotels, and would purchase food, beverages, and other commodities, which would provide economic benefit to the local economy (Class IV).

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

Construction of transmission line upgrades and substation modifications would not involve new structures, and all upgrades would occur parallel to the existing SDG&E lines, which would minimize the potential for disrupting an existing utility in the event of an accident. Under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the alternative to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Although accidental disruptions could occur, compliance with California Government Code §§4216-4216.9 (see Section D.14.5 for more detail) and APMs PSU-APM-1 and PSU-APM-2 would reduce the likelihood of accidental disruptions. Therefore, potential impacts related to a collocation accident or utility disruption would be less than significant (Class III). No mitigation measure is required.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Water and Solid Waste. Construction activities and techniques for overhead transmission line upgrades and substation modifications would be similar to those for the Proposed Project, except water usage, solid waste generation, and public services requirements would be reduced because construction of new poles or towers would not occur. Actual usage therefore would be similar to the Sycamore Canyon to Elliot Reconductoring segment, which would require 60,000 gallons total for dust control for 8.2 miles of reconductoring work. There would be adequate water supply and landfill capacity, because reconductoring the transmission lines and adding equipment to the substations would involve a fraction of the overall public service requirements of the Proposed Project (see Section D.14.5) or existing facilities supply. Therefore, it would not create a significant impact on existing public services (Class III). Although impacts to solid waste facilities and regional water supply would not be significant and no mitigation measure is required, to further reduce adverse effects of the cumulative volume of waste and water usage from all of the project, Mitigation Measure S-3a (Recycle construction waste) and S-3b (Use reclaimed water) would be recommended for implementation with this alternative to ensure that reduced water usage and maximum recycling activities would occur.

Fire Protection Services. Any increase in potential fire hazards resulting from construction would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

This alternative would occur within existing SDG&E 69, 138, and 230 kV ROWs and existing substation boundaries. Because the Coastal Link Upgrades would occur at existing facilities with little noticeable change in the facilities, there would be no impacts on property values (Impact S-5), change in property tax and/or fee revenues (Impact S-4), or increase in need for utilities and public services (Impact S-3).

D.14.19 Top of the World Substation Alternative Impacts and Mitigation Measures

The substation site would be located approximately one mile west of the proposed Central East Substation on Vista Irrigation District land. The transmission line routes into the 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 line would travel southwest for 400 feet and then west and north-northwest to rejoin the Proposed Project around MP 95.

Environmental Setting

Demographics, housing, and public services and utilities providers' information would be the same as the Proposed Project and the proposed Central East Substation in the Central Link, which is described in Section D.14.2.3.

Environmental Impacts and Mitigation Measures

Construction Impacts

As a result of the remote location on VID preserve land, Impact S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses) would not occur, as there are no businesses in the substation vicinity.

Impact S-2: Construction would disrupt the existing utility systems or cause a collocation accident (Class III)

The proposed Top of the World Substation Alternative would be located on VID land in a sparsely developed area with very few residences scattered around the substation vicinity. Therefore, the likelihood of encountering utility systems is low. However, there are scattered residences in the area and three miles of access roads would be installed. In addition there would be extensive grading and earthwork. Therefore, during grading and access road installation there is the potential to encounter and disrupt existing underground utilities in the area of the San Felipe rural community.

In addition, under PSU-APM-1, SDG&E would coordinate with all utility providers with facilities located within or adjacent to the project to ensure that design does not conflict with other utilities. With implementation of PSU-APM-2 (which has similar requirements to California Government Code §§4216-4216.9), Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines. Compliance with California Government Code §§4216-4216.9 (see Anza–Borrego Link impact discussion for more detail) and APMs PSU-APM-1 and PSU-APM-2 would ensure that the potential impacts related to a collocation accident or utility disruption would be less than significant (Class III). No mitigation measure is required.

Impact S-3: Project construction and operation would increase the need for public services and facilities (Class III)

Because construction activities and techniques would be the same as for the Proposed Project and the locations nearby, water usage, solid waste generation, and public services requirements would be similar for this alternative for substation construction. Although the Top of the World Substation site would have a longer access road, less grading and earthwork would be needed for the site itself. Refer to Section

D.14.5.3. Similarly, although impacts to solid waste facilities and regional water supply would not be significant and no mitigation would be required, to further reduce adverse effects of the cumulative volume of waste and water usage from all of the project, Mitigation Measure S-3a (Recycle construction waste) and S-3b (Use reclaimed water) would be recommended for implementation with this substation alternative to ensure that reduced water usage and maximum recycling activities would occur. The full text of the mitigation measures can be found in Appendix 12.

Fire Protection Services. Any increase in potential fire hazards resulting from construction of the substation alternative would increase temporary demands for fire protection services and is discussed in Section D.15 (Fire and Fuels Management).

Mitigation Measure for Impact S-3: Project construction and operation would increase the need for public services and facilities

S-3a Recycle construction waste.

S-3b Use reclaimed water.

Operational Impacts

As a result of the remote location on VID preserve land, Impact S-1 (Project construction and/or transmission line presence would cause a change in revenue for businesses) and S-5 (Presence of the project would decrease property values) would not occur. SDG&E would likely lease the land for the substation site from VID instead of purchasing the property, and therefore Impact S-4 (Property tax revenues and/or fees from project presence would substantially benefit public agencies) would also not occur.

D.14.20 Mitigation Monitoring, Compliance, and Reporting Table

Table D.14-15 presents the mitigation monitoring, compliance and reporting table for Socioeconomics. Mitigation measures not originating in the socioeconomics and public services sections 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 Proposed Project impacts and their respective mitigation measures, please see the Impact Summary Tables at the end of the Executive Summary.

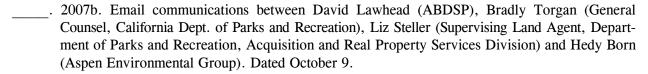
Sections D.14.11 and D.14.12 recommend mitigation measures for the projects described under Future Transmission System Expansion and Connected Actions/Indirect Effects. Those mitigation measures are presented for consideration by the agencies that will issue permits for construction of the connected 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.14-15. Mitigation Monitoring Program – Socioeconomics		
S-2a: Notify public of utility service interruption. Prior to construction in which a utility service interruption is known to be unavoidable, SDG&E shall notify members of the public affected by the planned outage by mail of the impending interruption, and shall post flyers informing the public of the service interruption in neighborhoods affected by the planned outage. Copies of notices and dates of public notification shall be provided to the CPUC and BLM.		
Locations where existing utility services would have planned interruption of services.		
CPUC/BLM monitor verifies that SDG&E posted notices/flyers and that copies have been submitted to the CPUC and the BLM.		
Residents and landowners are informed of planned outages.		
CPUC; BLM.		
Prior to the start of project construction in an area where utility service interruption is known to be unavoidable.		
 S-2b: Protect underground utilities. Prior to construction of the underground transmission line, SDG&E shall submit to the CPUC and BLM written documentation, including evidence of review by the appropriate jurisdictions, including the following: Construction plans designed to protect existing utilities and showing the dimensions and location of the finalized alignment Records that the Applicant provided the plans to affected jurisdiction for review, revision and final approval Evidence that the project meets all necessary local requirements Evidence of compliance with design standards Copies of any necessary permits, agreements, or conditions of approval Records of any discretionary decisions made by the appropriate agencies. 		
Along the entire route, especially during underground construction where existing utility services would potentially be disrupted or a collocation accident would potentially occur.		
CPUC/BLM shall monitor to verify that SDG&E provides the CPUC with documentation		
Minimal disruption of existing utilities		
CPUC; BLM		
Prior to construction of underground transmission lines.		

Table D.14-15. Mitigation Monitoring Program – Socioeconomics		
MITIGATION MEASURE	S-3a: Recycle construction waste. To comply with the Integrated Waste Management Act of 1989, during project construction SDG&E and/or its construction contractor shall recycle a minimum of 50 percent of the waste generated during construction activities. In unincorporated San Diego County, to comply with the construction and demolition debris ordinance, SDG&E and/or its construction contractor shall recycle a minimum of 90 percent of inerts and 70 percent of all other materials, and submit all applicable plans and documentation. Following the completion of construction activities, SDG&E shall provide the CPUC and BLM with documentation from the recycling and landfill facilities used to show that the amount of waste recycled was 50 percent or more in Imperial Valley and incorporated San Diego County, and 90 percent of inerts and 70 percent of all other materials in unincorporated San Diego County.	
Location	All project locations	
Monitoring / Reporting Action	CPUC/BLM shall monitor to verify that SCE provides the CPUC with documentation from the recycling and landfill facilities	
Effectiveness Criteria	Recycle a minimum of 50 percent of the waste generated during construction activities.	
Responsible Agency	CPUC; BLM	
Timing	During project construction	
MITIGATION MEASURE	S-3b: Use reclaimed water. To the extent feasible, SDG&E shall coordinate with local water districts in advance in order to efficiently obtain reclaimed or potable water for delivery to the construction sites and to meet any restrictions imposed by them. The Applicant shall provide a letter describing the availability of reclaimed water and efforts made to obtain it for use during construction to the CPUC and BLM a minimum of 60 days prior to the start of construction.	
Location	All project locations	
Monitoring / Reporting Action	CPUC/BLM shall monitor to verify that SDG&E provides the CPUC with documentation	
Effectiveness Criteria	Use of reclaimed water (recommended but not required for implementation)	
Responsible Agency	CPUC; BLM	
Timing	Sixty (60) days prior to the start of project construction	
MITIGATION MEASURE	S-3c: Ensure adequate law enforcement and safety personnel. SDG&E shall consult with ABDSP and shall provide additional personnel, equipment, and/or funding for increased patrol and law enforcement and public safety services, the number of personnel to be determined as deemed necessary to maintain existing levels of service as a result of increased public access from new access and spur roads. A summary of the final outcome of these negotiations shall be submitted to the CPUC and BLM at least 60 days prior to completion of construction within ABDSP.	
Location	ABDSP	
Monitoring / Reporting Action	CPUC/BLM shall monitor to verify that SDG&E provides the CPUC and BLM with documentation of negotiations and outcome	
Effectiveness Criteria	Existing levels of service are maintained	
Responsible Agency	CPUC; BLM	
Timing	Sixty (60) days prior to the start of project construction	

D.14.21 References

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