

D.10 Public Services and Utilities

This section addresses the environmental setting and impacts to public services and utilities from the Proposed Project and the alternatives identified in Section C. This analysis focuses on the capacities and capabilities of existing public services and utilities and examines how the Proposed Project would affect these systems. Sections D.10.1 and D.10.2 describe the environmental and regulatory public services and utility setting, respectively. Section D.10.3 provides analysis and discussion of public services and utility impacts resulting from the Proposed Project. Sections D.10.4 and D.10.5 present analysis for the alternatives. Section D.10.6 provides mitigation monitoring and reporting information.

D.10.1 Environmental Setting for the Proposed Project

This public service and utility systems analysis examines the utility and service provisions along the Proposed Project route. Because government agencies have recently categorized data pertaining to utility systems (including their location, capacity, and type) as sensitive, critical infrastructure information, public access to these data has become restricted for security reasons. As such, only information that continues to be made public and is readily accessible is presented in this section. While specific data would provide a better picture of the existing utilities along the pipeline corridors, in large part, this level of detail is unnecessary for the level of analysis needed to determine the impacts generated by the Proposed Project.

The Proposed Project area is served by public service and utility systems within San Diego County, the Cities of San Diego and Santee, and MCAS Miramar. A variety of local purveyors in this area provide and maintain utility and service system facilities associated with electricity, water, stormwater and wastewater, solid waste, and natural gas. Municipally operated lines provide sewer services in each of the jurisdictions along the Proposed Project route. Similarly, stormwater flows are conveyed by the flood control facilities of each respective jurisdiction. Table D.10-1 summarizes the public services and utilities providers serving the study area.

Table D.10-1. Utility and Service Providers by Jurisdiction

Jurisdiction	Utility or Service System Provider
City of San Diego	<ul style="list-style-type: none"> • Natural Gas & Electricity – San Diego Gas & Electric • Water – City of San Diego Water Department (from San Diego County Water Authority) • Wastewater – City of San Diego Metropolitan Wastewater Department • Fire Protection – San Diego Fire Department • Police Protection – San Diego Police Department • Telephone – Pacific Bell • Cable Television – Cox Communications and Time Warner Cable • Hospitals – Alvarado Hospital Medical Center, Charter Behavioral Health System of San Diego, Children's Hospital and Health Center, Kaiser Foundation Hospital, Mission Bay Hospital, Naval Medical Center, San Diego County Psychiatric Hospital, San Diego Hospice, Scripps Mercy Hospital, Sharp Cabrillo Hospital, Sharp Memorial Hospital, University Of California San Diego Medical Center, Vencor Hospital-San Diego, Veterans Affairs Medical Center, Villaview Community Hospital • Solid Waste – City of San Diego Department of Environmental Services, Refuse Collection Division • Landfills Used – Arvin Sanitary Landfill, Fontana Refuse Disposal Site, Frank R. Bowerman Sanitary Landfill, Otay Annex Landfill, Prima Deshecha Sanitary Landfill, Ramona Landfill, Sycamore Sanitary Landfill, West Miramar Sanitary Landfill • Transformation Facilities (Waste-To-Energy) Used – Commerce Refuse-To-Energy Facility, Covanta Stanislaus, Inc., Southeast Resource Recovery Facility

Table D.10-1. Utility and Service Providers by Jurisdiction

Jurisdiction	Utility or Service System Provider
City of Santee	<ul style="list-style-type: none"> • Natural Gas & Electricity – San Diego Gas & Electric • Water – Padre Dam Municipal Water District • Wastewater – Padre Dam Municipal Water District • Fire Protection – Santee Fire Department • Police Protection – San Diego County Sheriff’s Department • Telephone – Pacific Bell • Cable Television – Cox Communications and Time Warner Cable • Hospitals – Edgemoor Geriatric Hospital, Psychiatric Management Resources, Stanford Court Nursing Center • Solid Waste – City of Santee Public Services Division • Landfills Used – Arvin Sanitary Landfill, Frank R. Bowerman Sanitary Landfill, Otay Annex Landfill, Ramona Landfill, Sycamore Sanitary Landfill, West Miramar Sanitary Landfill
MCAS Miramar*	<ul style="list-style-type: none"> • Fire Protection – Navy & Marine Fire Protection Association, MCAS Miramar Fire Department • Police Protection – U.S. Marines Military Police • Landfills Used – Arvin Sanitary Landfill, Borrego Springs Landfill, Frank R. Bowerman Sanitary Landfill, Las Pulgas Landfill, Ocotillo Cut And Fill, Olinda Alpha Sanitary Landfill, Otay Annex Landfill, Prima Deshecha Sanitary Landfill, Ramona Landfill, Republic Imperial Landfill, San Onofre Landfill, Simi Valley Landfill - Recycling Center, Sycamore Sanitary Landfill, West Miramar Sanitary Landfill • Transformation Facilities (Waste-To-Energy) Used: Commerce Refuse-To-Energy Facility
San Diego County	<ul style="list-style-type: none"> • Natural Gas & Electricity – San Diego Gas & Electric • Water – San Diego County Water Authority • Wastewater – County of San Diego Department of Public Works Wastewater Management Section or City of San Diego Metropolitan Wastewater Department • Fire Protection – San Diego Rural Fire Protection District, California Department of Forestry and Fire Protection • Police Protection – San Diego County Sheriff’s Department • Telephone – Pacific Bell • Cable Television – Cox Communications and Time Warner Cable • Hospitals – Camp Pendleton Naval Hospital, Bayview Hospital and Mental Health System, Scripps Memorial Hospital-Chula Vista, Sharp Chula Vista Medical Center, Sharp Coronado Hospital, Kaiser Foundation Hospital, Scripps Memorial Hospital-Encinitas, Palomar Medical Center, Fallbrook Hospital District, Scripps Memorial Hospital-La Jolla, Grossmont Hospital, Paradise Valley Hospital, Tri-City Medical Center, Pomerado Hospital, Alvarado Hospital Medical Center, Charter Behavioral Health System of San Diego, Children’s Hospital and Health Center, Kaiser Foundation Hospital, Naval Medical Center, San Diego County Psychiatric Hospital, San Diego Hospice, Sharp Hospital-San Diego, Sharp Cabrillo Hospital, Sharp Memorial Hospital, University of California San Diego Medical Center, Kindred Hospital-San Diego, Veterans Affairs Medical Center, University Community Medical Center • Solid Waste – Coast Waste Management, Inc., Daily Disposal, Debris Box, Dependable Disposal (Burns & Sons), Dick’s Disposal Service, EDCO Disposal Corp., EDCO Waste & Recycling (Mashburn), Emerald Waste and Recovery Inc., Express Waste, Fallbrook Refuse Service, Pacific Waste Service, Ramona Disposal – Jemco, Solag Disposal, Inc. (CR&R), Valley Environmental Suburban Sanitation -Republic, Tayman Industries, Inc., Ware Disposal, Waste Management of North County, Waste Management El Cajon Hauling, USA • Landfills Used – Arvin Sanitary Landfill, Borrego Springs Landfill, Frank R. Bowerman Sanitary Landfill, Las Pulgas Landfill, Ocotillo Cut And Fill, Olinda Alpha Sanitary Landfill, Otay Annex Landfill, Prima Deshecha Sanitary Landfill, Ramona Landfill, Republic Imperial Landfill, San Onofre Landfill, Simi Valley Landfill - Recycling Center, Sycamore Sanitary Landfill, West Miramar Sanitary Landfill • Transformation Facilities (Waste-To-Energy) Used – Commerce Refuse-To-Energy Facility

*Not all information publicly available.

Sources: PEA, 2002/Allman & Company, 2003/Hotline Database, 2003/City of San Diego, 2003/SDG&E, 2003/MCAS Miramar, 2003/SDCSD, 2003/City of Santee, 2003/PDMWD, 2003/Studner, 2003

Each jurisdiction provides waste management services through regional landfills and permitted treatment and disposal facilities. Table D.10-2 lists the total and remaining capacities of solid waste facilities serving the project area.

Table D.10-2. Solid Waste Capacity

Facility Name	Total Capacity (cubic yards)	Remaining Capacity (cubic yards)	Remaining Capacity (%)	Maximum Throughput (tons/day)
Landfills				
Arvin Sanitary Landfill	11,464,719	2,246,33	20	N/R
Borrego Springs Landfill	706,745	280,745	39.7	50
Fontana Refuse Disposal Site	N/R	N/R	N/R	N/R
Frank R. Bowerman Sanitary Landfill	117,000,000	81,600,000	70	8,500
Las Pulgas Landfill	10,680,000	1,530,000	14.3	270
Ocotillo Cut And Fill	516,267	502,133	97.3	9
Olinda Alpha Sanitary Landfill	74,900,000	50,242,370	67	8,000 cu.yd.
Otay Annex Landfill	59,857,199	18,704,822	31.2	5,000
Prima Deshecha Sanitary Landfill	81,000,000	-8,400,000	-10	4,000
Ramona Landfill	2,200,000	1,759,170	80	295
Republic Imperial Landfill	1,936,000	1,643,186	84.9	130
San Onofre Landfill	1,920,000	513,000	26.7	50
Simi Valley Landfill-Recycling Center	43,500,000	9,473,131	22	3,000
Sycamore Sanitary Landfill	27,947,234	4,178,199	15	3,300
West Miramar Sanitary Landfill	35,200,000	12,005,117	34.1	8,000
Transformation Facilities (Waste-to-Energy)				
Commerce Refuse-To-Energy Facility	N/A	N/A	N/A	1,000
Covanta Stanislaus, Inc.	N/R	N/R	N/R	N/R
Southeast Resource Recovery Facility	N/R	N/R	N/R	N/R

Source: CIWMB, 2003.
N/R = Not Reported

D.10.2 Applicable Regulations, Plans, and Standards

The following section presents the State, regional and local utility and service system regulations, plans, and standards that are directly applicable to the Proposed Project and alternatives.

State

The responsibilities of utility operators are detailed in Sections 1091-1102, Chapter 5 "Certificates of Public Convenience and Necessity", Article 5 of the California Public Utilities Code. For the construction of utility lines in excess of 50 megawatts in which there is a significant potential for problems to occur, this law requires utilities to appoint a construction project board of consultants to evaluate the design, construction, project management, and economic soundness of the proposed line. The potential for problems to arise from the project is determined from information submitted in the project's application to the Public Utilities Commission, subject to Sections 1003 and 1003.5, Chapter 5, Article 1 of the California Public Utilities Code.

Regional and Local

The municipal plans for the City of San Diego and the City of Santee, as well as plans for a number of the parks and recreational facilities within the study area, have a variety of goals and policies related to utilities and public service systems and 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 locational, safety, and visual issues associated with the Proposed Project are discussed in Sections D.7, Land Use, D.9, Public Health and Safety, and D.13, Visual Resources, respectively. While 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, none directly address the public service issues associated with this project in particular.

D.10.3 Environmental Impacts and Mitigation Measures

D.10.3.1 Significance Criteria

Significant impacts to public services and utilities would occur if any of the following would occur:

- The Proposed Project would disrupt the existing utility systems or would cause a collocation accident;
- The Proposed Project would preclude emergency access or access to public facilities, or would increase the need for police, fire, or school facilities; or
- The Proposed Project would require water, or would generate solid waste or wastewater, that exceeds the ability of existing facilities to accommodate the new capacities.

D.10.3.2 Project Protocols

SDG&E proposes to implement the Project Protocols presented in Table D.10-3 to reduce impacts to public services and utilities associated with construction (PEA, 2002). These Project Protocols are considered part of the project description for the purposes of environmental impact analysis (i.e., they are not mitigation measures). The CPUC ensures compliance with these measures by monitoring their implementation prior to and during construction.

Table D.10-3. Project Protocols – Public Services and Utilities

PP No.	Description
3	Project construction activities shall be designed and implemented to avoid or minimize new disturbance, erosion on manufactured slopes, and off-site degradation from accelerated sedimentation, and to reduce maintenance and repair costs. Maintenance of cut and fill slopes created by project construction activities would consist primarily of erosion repair. In situations where revegetation would improve the success of erosion control, planting or seeding with native hydroseed mix may be done on slopes.
5	In areas where ground disturbance is substantial or where recontouring is required (e.g., marshaling yards, tower sites, spur roads from existing access roads), surface restoration would occur as required by the governmental agency having jurisdiction. The method of restoration normally would consist of returning disturbed areas back to their original contour, reseeding (if required), installing cross drains for erosion control, placing water bars in the road, and filling ditches for erosion control. Erosion would be minimized on access roads and other locations primarily with water bars. The water bars would be constructed using mounds of soil shaped to direct the flow of runoff and prevent erosion. Soil spoils created during ground disturbance or recontouring shall be disposed of only on previously disturbed areas, or used immediately to fill eroded areas. However, material for filling in eroded areas in roads or road ruts should never be obtained from the sides of the road that contain habitat without the approval of the onsite biological resource monitor. Cleared vegetation would be hauled off-site to a permitted disposal location. To limit impact to existing vegetation, appropriately sized equipment (e.g., bulldozers, scrapers, backhoes, bucket-loaders, etc.) would be used during all ground disturbance and recontouring activities.

Table D.10-3. Project Protocols – Public Services and Utilities

PP No.	Description
6	Potential hydrologic impacts would be minimized through the use of best management practices (BMPs) such as water bars, silt fences, staked straw bales, and mulching and seeding of all disturbed areas. These measures will be designed to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water.
7	Prior to construction, all SDG&E, contractor, and subcontractor project personnel would receive training regarding the appropriate work practices necessary to effectively implement the Protocols and to comply with the applicable environmental laws and regulations including, without limitation, hazardous materials spill prevention and response measures, erosion control, dust suppression, and appropriate wildlife avoidance, impact minimization procedures, and Stormwater Pollution Prevention Plan (SWPPP) BMPs. To assist in this effort, the training would address: (a) federal, State, local, and tribal laws regarding antiquities, fossils, plants, and wildlife, including collection and removal; (b) the importance of these resources and the purpose and necessity of protecting them; and (c) methods for protecting sensitive cultural, paleontological, and ecological resources.
38	Secure any required General Permit for Storm Water Discharges Associated with Construction Activity (NPDES permit) authorization from the SWRCB and/or the RWQCB to conduct construction-related activities to build the project and establish and implement a SWPPP erosion control measures during construction to minimize hydrologic impacts in areas sensitive from flooding or siltation into waterbodies.
66	Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify buried utilities.

Source: SDG&E, 2002.

D.10.3.3 Environmental Impacts and Mitigation Measures

Impact U-1: Utility System Disruptions

Between Miguel Substation and Fanita Junction, a distance of approximately 24 miles, a new 230 kV circuit would be installed onto existing steel lattice tower structures currently supporting 138 kV and 69 kV circuits. The existing 138 kV and 69 kV circuits would be relocated to a newly constructed alignment of wood and steel pole structures within the existing SDG&E ROW. Between Fanita Junction and Mission Substation, a distance of approximately 11 miles, the new 230 kV circuit would be installed in a vacant position on existing steel lattice and steel pole structures. Along this later segment, no towers would be modified and no new poles would be installed.

During construction of the Proposed Project, installation of the new poles would require drilling and excavation for new foundations. It is possible that buried utility lines (e.g., water, sewer, electricity, natural gas, telecommunications, etc.) share the proposed ROW with existing transmission lines or run perpendicular to the proposed ROW. Therefore, there could be a potential for utility service interruptions during drilling and excavation activities associated with the Proposed Project. Pole replacement activities would be limited to the portion of the ROW between Miguel Substation and Fanita Junction only. Excavation and drilling along the proposed overhead segment would be in specific locations along the existing 138 kV and 69 kV circuit line ROW where there would be a need for tower replacements. New tower drilling and excavation activities could potentially impact buried utility crossings along this segment of the proposed route, particularly near residential areas or public ROWs in urbanized areas. Since construction along this segment would not require continuous trenching, potential for accidental disruption of utilities is relatively low. However, as described above in PP-66, the Applicant is required by State law to contact Underground Service Alert and manually probe for existing buried utilities in the Proposed Project corridor prior to any powered-equipment drilling or excavation. After probing within the corridor for existing utilities, exact placement of the tower and pole foundations would be determined so that they would not conflict with other co-located utilities. This Project Protocol would reduce these potential impacts to an adverse but less than significant level (Class III).

Section B.4.7 of the Project Description describes potential electrical service interruptions during construction. The Applicant plans on sequencing the construction of the new line in sections, taking only one or two connections out of service at a time to ensure that minimal interruptions to the existing line would occur. SDG&E would notify customers and businesses well in advance of any such planned local outage. Therefore, potential electrical utility service outage impacts are considered adverse but less than significant (Class III).

Impact U-2: Public Service System Disruptions

Fire protection or other emergency service providers could be required at a project construction site in the event of a construction accident. The likelihood of an accident requiring such a response would be low. Overall, project construction would not occur in dangerous areas; the biggest potential hazard would be fire associated with the dry vegetation along the route. However, the watering associated with dust suppression for disturbed areas would reduce the potential for this type of accident to occur. Therefore, the service capacities of local fire departments in which accidents could occur would not be affected by the Proposed Project. As identified in Table D.10-1, local fire service would be provided by a number of municipal fire protection providers throughout the ROW.

While the majority of project construction and staging would be confined to the proposed substation sites and ROW, stringing of utility line could interfere with access for fire, police, or other emergency vehicles to surrounding properties when crossing existing roadways. By ensuring the inclusion of traffic control measures identified in the California Joint Utility Traffic Control Committee (CJUTCC) Work Area Protection and Traffic Control Manual (CJUTCC, 1999), Mitigation Measure U-2a would reduce this impact to a less than significant level (Class II).

Mitigation Measure for Impact U-2, Public Service System Disruptions

U-2a Maintain adequate emergency vehicle access. As appropriate, SDG&E shall implement measures from the Work Area Protection and Traffic Control Manual to maintain adequate emergency vehicle access when crossing existing roadways. These protocols ensure use of highly visible warning signs, flaggers, barricades, flashers, or traffic cones to give advance warning, and use of channelization devices to define traffic lanes through the work zone and separate opposing lanes of traffic. Flaggers shall wear approved warning garments and follow standard flagging procedures.

Impact U-3: Project-Required Utility and Public Service Demands

During project construction, water would be required for dust suppression and cleaning of 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. Water for foundation construction or other activities would comprise a small fraction of the total water used for the project. Water required for consumption by construction crews would be minimal. Once constructed, the Proposed Project would require only small amounts of water for washing the insulators and other maintenance activities. As identified in Table D.10-1, the project route is served by a variety of potable and non-potable water sources that should adequately supply the required water. Because project construction would be temporary and short-term, the quantity of water used for the Proposed Project is considered to be relatively minor. Therefore, the water demand for construction of the Proposed Project would have an adverse but less than significant impact (Class III) on the regional water supply.

Proposed Project construction would generate waste largely in the form of soil, concrete from existing foundations, and scrap metal from the existing tower replacements. As described in Section B, Project Description, approximately 31 existing wood and metal transmission towers are to be removed under the Proposed Project and replaced with new towers. Metal from the tower structures would be transported by truck or helicopter to staging areas for dismantling. The remaining metal debris would be hauled to a recycling plant. New tower footings and foundations would require excavation of holes 3 feet in diameter and 8 to 12 feet in depth (wood poles) to approximately 8 to 9 feet in diameter and 20 to 40 feet in depth (steel poles). Debris would be removed before the hole would be backfilled with soil and revegetated. This material, along with packing crates, spare bolts, and other construction debris would be hauled offsite for recycling or disposal at local landfills. Soil from drilling or excavation for new tower foundations would be screened and separated for use as backfill materials at the site of origin to the maximum extent possible. Spoils unsuitable for backfill use would be disposed of at appropriate disposal sites. As identified in Tables D.10-1 and D.10-2, 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 is expected to be available. Recycling activities would reduce the quantity of construction-related materials transported to local landfills. Construction activities would not substantially affect the remaining capacities of local landfills. Project operations would not generate solid waste and would therefore not affect existing landfill capacities. Impacts to solid waste facilities would be adverse, but less than significant (Class III).

As discussed in Section D.6, Hydrology and Water Quality, the Proposed Project would not generate or increase wastewater or stormwater runoff. While the construction of new tower foundations and new footings would incrementally increase non-permeable surfaces along the proposed route, the existing footings and foundations would be removed and backfilled with soil, thus equaling the permeable surface area in the existing tower locations. There would be little change in the amount of runoff resulting from the Proposed Project. Project Protocols (PP-3, PP-5, PP-6, PP-7, and PP-38) identified in Table D.10-3 would further reduce any potential stormwater impacts to less than significant levels. Portable toilets brought to staging areas for construction crews would be emptied into septic tanks or municipal sewage systems. Because no new operational employees would be needed at the substations, operation of the Proposed Project substations would not generate wastewater in amounts exceeding the capacity of local facilities. Impacts due to demands on wastewater facilities would be adverse but less than significant (Class III).

As discussed in Section D.11, Socioeconomics, neither construction nor operation of the Proposed Project is expected to result in an increase in the local population. Few workers are expected to relocate to the area temporarily for construction and no new workers are required for operation of the project. Therefore, the Proposed Project would not increase any demands on schools or lower the long-term level of service for fire protection or police protection. There would be no impacts to existing schools, fire, or police department service capabilities.

D.10.3.4 Future 230 kV Circuit within Miguel-Mission ROW

The future 230 kV circuit would be installed in a vacant position on existing steel lattice and steel pole structures. Therefore, no towers would be modified and no poles would be installed. Construction activities would not require trenching or drilling and excavation for new tower foundations that could result in potential service interruptions to buried utilities. However, while project construction and staging would be confined to the proposed ROW, stringing of utility line could interfere with emergency access to surrounding properties when crossing existing roadways. Mitigation Measure U-2a would be required for future 230 kV transmission line construction to minimize this potential impact to an adverse but less than significant level (Class II).

No new permanent employees would be required for operation of the future 230 kV transmission line. Because no new operational employees would be required for the electrical line facilities, operation of the future 230 kV line would not generate any increase to demands on water, wastewater, or solid waste facilities. Furthermore, the future 230 kV transmission line would not increase any demands on schools or lower the long-term level of service for fire protection or police protection. There would be no impacts to existing schools, fire, or police department service ratios. Adverse but less than significant (Class III) operational impacts to public service and utility providers and facilities would occur from the operation of the future 230 kV circuit.

D.10.4 Project Alternatives

D.10.4.1 Jamacha Valley 138 kV/69 kV Underground Alternative

Environmental Setting

The study area for this alternative is largely the same as for the Proposed Project (see Section D.10.1). Table D.10-1 lists the utility and service providers for the County of San Diego, Cities of San Diego and Santee, and MCAS Miramar. Near Jamacha Valley, the existing 138 kV and 69 kV circuits would be located underground for approximately 3.5 miles along Willow Glen Drive.

Environmental Impacts and Mitigation Measures

The impacts of this alternative would be greater than those of the Proposed Project due to trenching required for the underground portion of the alternative along the length of Willow Glen Drive to the intersection of Willow Glen Drive and Dehesa Road. The proposed PP-66 would reduce service disruption impacts to buried utility lines (Impact U-1) to adverse but less than significant levels (Class III). Similar to the Proposed Project, this alternative route could result in impacts to emergency service vehicle access during transmission line stringing across public roadways (Impact U-2). Mitigation Measure U-2a associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative to less than significant levels (Class II).

Construction of the alternative would require water for dust suppression and would generate small amounts of construction waste and construction debris. Minimal wastewater is expected to be generated during construction. Operations of the proposed substations would require no water and would generate no solid waste or wastewater and would have no impact on water supply, wastewater, and solid waste facilities. Impacts on utility and service provider demands (Impact U-3) associated with water supply, wastewater facilities, area landfills, and police and fire service would be adverse but less than significant (Class III).

Comparison to Proposed Project

Impacts associated with the Jamacha Valley 138 kV/69 kV Underground Alternative would be greater than those of the Proposed Project, but all impacts remain less than significant. Excavation for the underground portion of the route would have a greater potential to disrupt utilities such as water, electricity, natural gas, and telecommunications than excavation required for tower foundations. However, as discussed above, utility service interruptions could occur during the construction of both the Proposed Project and the Jamacha Valley 138 kV/69 kV Underground Alternative. Both would require implementation of PP-66 and notification to the public should utility services be disrupted in the surrounding area to mitigate these impacts.

Comparison to Proposed Project with Future Circuit

Impacts associated with the Jamacha Valley 138 kV/69 kV Underground Alternative with the future 230 kV circuit would be slightly greater than the Proposed Project with future circuit. Excavation for the underground portion of the alternative route would have a greater potential to disrupt utilities such as water, electricity, natural gas, and telecommunications than excavation required for tower foundations. However, as discussed above, utility service interruptions could occur during construction of both the Proposed Project and the Jamacha Valley 138 kV/69 kV Underground Alternative. Both would require implementation of PP-66 and notification to the public should utility services be disrupted in the surrounding area to mitigate these impacts. The future circuit would increase potential impacts to emergency service vehicle access during transmission line stringing across public roadways. Mitigation Measure U-2a associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative with future circuit.

D.10.4.2 Jamacha Valley Overhead A Alternative

Environmental Setting

The study area for this alternative would be the same as described for the Proposed Project, because it would be within the existing SDG&E ROW (see Section D.10.1). Table D.10-1 lists the utility and service providers for the project area.

Environmental Impacts and Mitigation Measures

The impacts of this alternative would be similar to those for the Proposed Project. The proposed PP-66 would reduce potential service disruption impacts to buried utility lines (Impact U-1) within the ROW during tower footing excavation to less than significant levels (Class III). Similar to the Proposed Project, the alternative route could result in impacts to emergency service vehicle access during transmission line stringing across public roadways (Impact U-2). Mitigation Measure U-2a associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative to a less than significant levels (Class II).

Construction of the alternative would require additional water for dust suppression because of the new and extended access roads required for this alternative and would generate small amounts of construction waste and construction debris. Minimal wastewater is expected to be generated during construction. Impacts on utility and service provider demands (Impact U-3) associated with water supply, wastewater facilities, area landfills, and police and fire service would be adverse but less than significant (Class III).

Comparison to Proposed Project

Installation of the Jamacha Valley Overhead A Alternative would cause a slightly greater likelihood of disrupting utilities during construction when compared to the Proposed Project but would have a greater requirement for water due to increased dust suppression activities. Similar to the Proposed Project, this alternative would require notification to the public should utility services be disrupted in the surrounding area. Mitigation associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative.

Comparison to Proposed Project with Future Circuit

Installation of the Jamacha Valley Overhead A Alternative with the future 230 kV circuit would result in temporary construction impacts similar to those of the Proposed Project with future circuit, though with a greater requirement for water. Similar to the Proposed Project, the Jamacha Valley Overhead A Alternative with future circuit would require notification to the public should utility services be disrupted in the surrounding area. Mitigation associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative with future circuit.

D.10.4.3 Jamacha Valley Overhead B Alternative

Environmental Setting

The study area for this alternative is the same as that for the Proposed Project because it would be within the existing SDG&E ROW (see Section D.10.1). Table D.10-1 lists the utility and service providers for the project area.

Environmental Impacts and Mitigation Measures

The impacts of this alternative would be similar to those for the Proposed Project. The proposed PP-66 would reduce potential service disruption impacts to buried utility lines (Impact U-1) within the ROW during tower footing excavation to less than significant levels (Class III). Similar to the Proposed Project, the alternative route could result in impacts to emergency service vehicle access during transmission line stringing across public roadways (Impact U-2). Mitigation Measure U-2a associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative to a less than significant levels (Class II).

Construction of the alternative would require water for dust suppression, and would generate small amounts of construction waste and construction debris. Minimal wastewater is expected to be generated during construction. Operations of the proposed substations would require no water and would generate no solid waste or wastewater and would have no impact on water supply, wastewater, and solid waste facilities. Impacts on utility and service provider demands (Impact U-3) associated with water supply, wastewater facilities, area landfills, and police and fire service would be adverse but less than significant (Class III).

Comparison to Proposed Project

Installation of the Jamacha Valley Overhead B Alternative would cause a slightly greater likelihood of disrupting utilities during construction when compared to the Proposed Project. Similar to the Proposed Project, this alternative would require notification to the public should utility services be disrupted in the surrounding area. Mitigation associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative.

Comparison to Proposed Project with Future Circuit

Installation of the Jamacha Valley Overhead B Alternative with the future 230 kV circuit would result in temporary construction impacts similar to those of the Proposed Project with future circuit. Similar to the Proposed Project, the Jamacha Valley Overhead B Alternative with future circuit would require

notification to the public should utility services be disrupted in the surrounding area. Mitigation associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative with future circuit.

D.10.4.4 City of Santee 138 kV/69 kV Underground Alternative

Environmental Setting

The study area for this alternative is largely the same as for the Proposed Project (see Section D.10.1). Table D.10-1 lists the utility and service providers for the County of San Diego, Cities of San Diego and Santee, and MCAS Miramar. The route under this alternative would be largely the same as described for the Proposed Project, with major differences in the route alignment through Santee. Relocation of the existing 69 kV circuit underground for approximately 0.6 miles outside the Miguel-Mission ROW along a water tank access road and 0.75 miles along the length of Princess Joann Road, and relocation of one 138 kV circuit underground along Princess Joann to Magnolia Avenue.

Environmental Impacts and Mitigation Measures

The impacts of this alternative would be greater than those of the Proposed Project due to trenching required in the City of Santee streets. The proposed PP-66 would reduce service disruption impacts to buried utility lines (Impact U-1) to adverse but less than significant levels (Class III). Similar to the Proposed Project, the alternative route could result in impacts to emergency service vehicle access during transmission line stringing across public roadways (Impact U-2). Mitigation Measure U-2a associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative to less than significant levels (Class II).

Construction of the alternative would require water for dust suppression and would generate small amounts of construction waste and construction debris. Minimal wastewater is expected to be generated during construction. Operations of the proposed substations would require no water and would generate no solid waste or wastewater and would have no impact on water supply, wastewater, and solid waste facilities. Impacts on utility and service provider demands (Impact U-3) associated with water supply, wastewater facilities, area landfills, and police and fire service would be adverse but less than significant (Class III).

Comparison to Proposed Project

Impacts associated with the City of Santee 138 kV/69 kV Underground Alternative would be slightly greater than the Proposed Project. Excavation for the underground portion of the route would have a greater potential to disrupt utilities such as water, electricity, natural gas, and telecommunications than excavation required for tower foundations. However, as discussed above, utility service interruptions could occur during construction of both the Proposed Project and alternatives. Both would require notification to the public should utility services be disrupted in the surrounding area to mitigate these impacts.

Comparison to Proposed Project with Future Circuit

Impacts associated with the City of Santee 138 kV/69 kV Underground Alternative with the future 230 kV circuit would be slightly greater than the Proposed Project with future circuit. Excavation for the underground portion of the alternative route would have a greater potential to disrupt utilities such as

water, electricity, natural gas, and telecommunications than excavation required for tower foundations. However, as discussed above, utility service interruptions could occur during construction of both the Proposed Project and the City of Santee 138 kV/69 kV Underground Alternative. Both would require notification to the public should utility services be disrupted in the surrounding area to mitigate these impacts. The future circuit would increase potential impacts to emergency service vehicle access during transmission line stringing across public roadways. Mitigation associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative with future circuit.

D.10.4.5 City of Santee 230 kV Overhead Northern ROW Boundary Alternative

Environmental Setting

The study area for this alternative is the largely the same as for the Proposed Project because this alternative would be adjacent to the alignment of the Proposed Project (see Section D.10.1). Table D.10-1 lists the utility and service providers for the project area.

Environmental Impacts and Mitigation Measures

The impacts of this alternative would be similar to those for the Proposed Project. The proposed PP-66 would still be required to reduce potential service disruption impacts to buried utility lines (Impact U-1) within the ROW during tower footing excavation to less than significant levels (Class III). Similar to the Proposed Project, the alternative route could result in impacts to emergency service vehicle access during transmission line stringing across public roadways (Impact U-2). Mitigation Measure U-2a associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative to a less than significant levels (Class II).

Construction of the alternative would require water for dust suppression and would generate small amounts of construction waste and construction debris. Minimal wastewater is expected to be generated during construction. Impacts on utility and service provider demands (Impact U-3) associated with water supply, wastewater facilities, area landfills, and police and fire service would be adverse but less than significant (Class III).

Comparison to Proposed Project

Installation of the City of Santee 230 kV Overhead Northern ROW Boundary Alternative would result in temporary construction impacts similar to those of the Proposed Project, except that construction along the northern edge of the ROW would be slightly less likely to disrupt utilities, especially east of Magnolia Avenue. Similar to the Proposed Project, this alternative would require notification to the public should utility services be disrupted in the surrounding area. Mitigation associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative.

Comparison to Proposed Project with Future Circuit

Installation of the City of Santee 230 kV Overhead Northern ROW Boundary Alternative with the future 230 kV circuit would result in temporary construction impacts similar to those of the Proposed Project with future circuit. Similar to the Proposed Project, the City of Santee 230 kV Overhead Northern ROW Boundary Alternative with future circuit would require notification to the public should

utility services be disrupted in the surrounding area. Mitigation associated with the Proposed Project would also be required to mitigate possible emergency access impacts during construction of this alternative with future circuit.

D.10.5 Environmental Impacts of the No Project Alternative

The No Project Alternative would consist of additional regional generation and/or CAISO-implemented congestion measures. Of these two components of the No Project Alternative, only additional regional generation would likely result in potential construction and operations related impacts associated with public services and utilities. Although new power plants may be necessary in the San Diego area, their location and schedule for development cannot be predicted. However, general construction and maintenance activities associated with the new power plants would likely require water, wastewater treatment, and solid waste disposal services. The construction and operation of new power plants would not require the need for public services such as schools, but could potentially require increased fire and police protection.

D.10.6 Mitigation Monitoring, Compliance, and Reporting Table

Table D.10-4 shows the mitigation monitoring, compliance, and reporting program for Public Services and Utilities.

Table D.10-4. Mitigation Monitoring Program – Public Services and Utilities

IMPACT U-2	Public Service System Disruptions (Class II)
MITIGATION MEASURE	U-2a: Maintain adequate emergency vehicle access. As appropriate, SDG&E shall implement measures from the Work Area Protection and Traffic Control Manual to maintain adequate emergency vehicle access when crossing existing roadways. These protocols ensure use of highly visible warning signs, flaggers, barricades, flashers, or traffic cones to give advance warning, and use of channelization devices to define traffic lanes through the work zone and separate opposing lanes of traffic. Flaggers shall wear approved warning garments and follow standard flagging procedures.
Location	Streets crossing the ROW
Monitoring / Reporting Action	Traffic control plans/reports
Effectiveness Criteria	Plan compliance
Responsible Agency	Applicant
Timing	During construction

D.10.7 References

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