

This section includes a discussion of topics required by CEQA, including:

- Growth-inducing effects (Section 7.1)
- Significant environmental effects that cannot be avoided (Section 7.2) as identified in Sections 4.1 through 4.16 of this Draft EIR
- Significant irreversible changes (Section 7.3)
- Impacts on human beings (Section 7.4)
- Energy conservation (Section 7.5)
- Effects not found to be significant (Section 7.6)

7.1 GROWTH-INDUCING EFFECTS

An EIR must contain a description of the proposed project's growth-inducing impacts (California PRC Section 21100(b)(5)). The discussion must address "ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment" (CEQA Guidelines Section 15126.2(d)).

The growth-inducing effects of a proposed project are considered significant if the project directly causes population growth beyond that considered in local and regional land use plans, or other relevant population growth projections. Effects would also be significant if the proposed project would accommodate population growth beyond that considered in local and regional land use plans or other relevant population growth projections.

7.1.1 Growth Caused by Direct and Indirect Employment

There would be no permanent population growth in the area due to direct employment. During peak construction periods, approximately 91 workers would be working on the proposed project. Because of the short-term nature of the construction period, it is anticipated that most of the construction workers would come from the local labor pool available in the County, with workers expected to commute to construction sites rather than move their residences. The operations and maintenance work required for the new proposed substation and power line would be fulfilled by the existing local SDG&E workforce, and no new permanent jobs would be created. Construction and operation of the proposed project would not result in direct or indirect impacts on population growth.

7.1.2 Growth Related to Provision of Additional Electric Power

SDG&E provides electrical power services to the southeastern Chula Vista area and therefore must plan for facilities to meet the electric demand of growth that is planned and approved by the local planning agencies. SDG&E currently operates the Telegraph Canyon and Proctor Valley Substations, which provide service in Chula Vista. These substations are nearing capacity. Due to City-approved commercial and residential development in the southeastern Chula Vista service territory, additional distribution substation capacity is needed to serve the existing load and new load created by the approved development projects.

According to SDG&E's load forecast, the proposed substation is required to meet current demand and expected electrical load growth, to maintain reliable electric service, and to prevent extended outages and disruption of services to customers in southeastern Chula Vista. While the project would create new infrastructure, it would not extend infrastructure to previously unserved areas. The proposed substation would accommodate current demand projections identified by SDG&E, consistent with projects approved by the City and population projections established by SANDAG for the southeastern Chula Vista service area.

The proposed project is consistent with growth projections developed by SANDAG, and has been designed to meet SDG&E's mandate to provide electrical service sufficient to meet demand and ensure continuous reliable service to its customers. Population growth in southeast Chula Vista is driven primarily by development of the Otay Ranch master planned community. The City of Chula Vista prepared an EIR for the Otay Ranch Master Plan and separate EIRs for the development of each village or community. These EIRs separately addressed growth inducing impacts from the residential development in the area. The proposed project would not modify land use or zoning designations to permit new residential or commercial development and therefore would not foster growth, remove direct growth constraints, or add a direct stimulus to growth.

The provision of electricity is not considered removal of a barrier to growth. Electricity, on its own, is generally not the sole obstacle to growth in any specific area. Other factors, such as the economic conditions of the area, land availability, or the adequacy of water supplies, affect population growth more than the provision of electricity. The provision of additional electricity due to the proposed project would support the growth projections for the service area. The proposed project would not create new opportunities for local industry or commerce and would not induce growth through economic opportunities. In the absence of the proposed project, the planned development and population growth would occur; however, the electrical services in the area would become more unreliable over time as the demand for energy increases and exceeds the capacity of the existing area substations.

7.2 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED

Section 15126.2(b) of the CEQA Guidelines requires that an EIR identify significant environmental effects which cannot be avoided by the proposed project, including those that can be mitigated but not to a less-than-significant level. The proposed project would result in

aesthetic, noise, and recreational resources impacts that, even with implementation of mitigation measures, would remain significant and unavoidable. Substation construction and presence of the substation fill slopes and facility would substantially degrade the visual quality of the area. Landscaped screening of the facility would, over a period of approximately five years, mitigate the impacts as the landscaping around the substation matures. The proposed substation and power line construction activities, including heavy equipment and helicopter use, would result in a substantial temporary increase in noise levels. The degradation of aesthetic resources and increased noise in the vicinity of the substation would significantly impact the recreational experience and recreational value of trails near the substation.

7.3 SIGNIFICANT IRREVERSIBLE CHANGES

Pursuant to Section 15126.2(c) of the CEQA Guidelines, an EIR must address significant irreversible environmental changes and irretrievable commitments of resources that would be caused by the proposed project. These changes include uses of nonrenewable resources during construction and operation, long-term or permanent access to previously inaccessible areas, and irreversible damages that may result from project-related accidents.

7.3.1 Nonrenewable Resources

The use of nonrenewable resources is considered an irreversible change to the environment. Construction and operation of the proposed project and alternatives would require the direct consumption of nonrenewable fossil fuels, and fossil fuels would indirectly be used to produce construction materials that may not be recycled.

During construction, nonrenewable fossil fuel consumption of energy would be needed for construction vehicles, construction equipment, and helicopter use. Fossil fuel consumption associated with vehicle use during operation and maintenance would be far less than during construction because maintenance activities would only occur intermittently. Use of nonrenewable resources during operation and maintenance would chiefly result from substation equipment (primarily the transmission circuit breakers) permanently housed at the project site. GHG emissions associated with the use of fossil fuels are well below the SCAQMD threshold for both construction and operation. The proposed project would not cause a substantial increase in the consumption or use of nonrenewable resources.

7.3.2 Long-term or Permanent Access to Previously Inaccessible Areas

A short segment of new access road would be constructed within Miguel Substation and the sewer access road to the proposed substation would be widened. The new access road within Miguel Substation would not provide access to previously inaccessible areas because the Miguel Substation site is fenced and not publicly accessible. The widening of the sewer access road will not increase access to any areas because the access road will remain in the same location and alignment. Neither the new access road nor the wider sewer access road will be accessible to the public. Thus, there would be no new public access to previously inaccessible areas.

7.3.3 Potential Accidents

Major construction activities, such as site preparation and the installation of components and equipment, would pose the greatest risks for accidents to occur. Occupational hazards are similar to those of the heavy construction and electric power industries (i.e., working at heights, exposure to weather extremes and high winds, exposure to dangerous animals and plants, working around energized systems, working around lifting equipment and large moving vehicles, and working in proximity to rotating/spinning equipment). State and federal regulations and safety requirements such as Cal/OSHA and as described in more detail in the regulatory setting in Section 4.8: Hazards and Hazardous Materials, would ensure that public health and safety risks are maintained at acceptable levels so that significant irreversible changes from accidents are not expected.

An accident that releases hazardous materials may cause significant irreversible changes to the environment. As discussed in Section 4.8, construction of the project would involve use of hazardous materials such as gasoline, paint thinner, petroleum products, etc. Refer to Table 4.8-6 for a full list of hazardous materials typically used for construction. Potential releases of hazardous materials may occur as a result of accidental spills. These may occur during construction, which includes vegetation clearing, grading, access road construction, pole removal or installation; conductor pulling, splicing, and tensioning; construction within temporary storage sites; transportation of hazardous materials to and from work areas; and during the refueling and servicing of equipment. An accidental spill may also occur during operation and maintenance of the proposed project. Activities that may result in an accidental spill include transportation and disposal of hazardous materials (Table 4.8-6 in Section 4.8: Hazards and Hazardous Materials identifies hazardous materials that may be used on the project) and herbicide application around poles to control vegetation. A potential accident could contaminate water and soil and may pose a threat to human health and safety. Minimal quantities of hazardous materials would be used with the exception of the fuel truck that would be used to refuel the helicopter and trucks transporting mineral oil to the proposed substation. The proposed project includes APM HAZ-1, which updates the SPCC Plan to reflect the storage of increased amounts of hazardous materials, and APM HAZ-2, which requires adherence to SDG&E's Management of Contaminated Equipment and Materials, Hazardous Materials Business Plan. BMPs in the SWPPP, which would be prepared under APM HYDRO-1, would be implemented to properly control and quickly clean up hazardous material spills.

The project also involves construction of pole foundations within four feet of buried high pressure gas lines. Accidental rupture of the high pressure gas pipeline would result in significant irreversible changes to the environment. Mitigation Measure Hazards-1 requires potholing to avoid conflicts with the high pressure gas pipeline. Significant irreversible changes from accidents would be avoided with the proposed APMs and required mitigation measures.

7.4 IMPACTS ON HUMAN BEINGS

The project would not cause substantial adverse effects on human beings directly or indirectly. The project will result in temporary impacts to human health during project construction due to

air quality emissions, hazards, and hazardous materials use (see Sections 4.3: Air Quality and 4.8: Hazards and Hazardous Materials). SDG&E included APMs as part of the project to minimize these effects, as explained and analyzed throughout the EIR. Impacts to these resources would be reduced to a less-than-significant level with the implementation of mitigation measures.

The proposed operation and maintenance activities along the transmission corridor would generally be the same as current operation and maintenance practices; therefore, no contribution to cumulative impacts on human beings would occur. The proposed operation and maintenance activities at the new substation would be minimal, non-invasive, low-intensity, and would not contribute to cumulative impacts on human beings. The project would have a beneficial effect on area residents by providing a more efficient and reliable supply of electricity.

7.5 ENERGY CONSERVATION

Pursuant to Appendix F: Energy Conservation of the CEQA Guidelines, an EIR must address potential energy impacts of the proposed project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

7.5.1 Proposed Project

SDG&E describes its strategy for meeting the future forecasted load in a mandatory Long-Term Procurement Plan (LTPP), which the CPUC approved most recently in September 2008. The strategy includes meeting energy demands first with conservation, then with renewable sources of electricity, and finally with new fossil fuel sources to the extent necessary (SDG&E 2013). The proposed project was designed to be consistent with the energy efficiency, demand response, and renewable energy programs outlined in the LTPP. The proposed project would increase the efficiency of energy delivery by constructing a new substation, which could deliver renewable energy already on the grid rather than relying on non-renewable generation to address peak loading. In addition, the project design includes the monitoring and maintenance of energy consuming equipment during operation. No increases in inefficiencies or unnecessary energy consumption are expected to occur as a direct or indirect consequence of the project. Therefore, no mitigation measures beyond those already present in this Draft EIR would be necessary. The proposed project would not have a measurable effect on per capita energy consumption.

Implementation of the proposed project would result in the consumption of energy as it relates to the fuel needed for construction-related activities and operation and maintenance of the new substation and power line. There is currently no energy use or service to the power line or proposed substation because those facilities do not exist and would be located in areas that are currently open space. Energy will primarily be used to power construction vehicles and equipment during construction of the proposed substation and power line. The majority of the construction equipment and vehicles will consume energy through the combustion of diesel or gasoline fuel.

SDG&E has proposed a temporary distribution tap into the substation site to provide power to service the construction trailer at the site during the substation construction and prior to energization of the project. There would be a nominal use of electricity to power lights and computers in the trailer.

Construction, operation, and maintenance of the project would also consume energy through worker and vehicle trips to the project area. There would be an average of 36 workers traveling to the project site each day during construction. The project would be remotely operated and there would be approximately one trip to the substation each week for inspections during operation. Additional vehicle trips would be required for maintenance of the substation and power line when equipment repair is needed. SDG&E has proposed APM AIR-2 to reduce wasteful consumption of energy during construction. APM AIR-2 limits idling of construction vehicles to 5 minutes.

7.5.2 Alternatives

The CPUC considered an energy conservation and efficiency alternative (Alternative 17 in ASR, refer to Appendix E) to the proposed project. The energy efficiency and conservation alternative would reduce energy use but does not meet the project objectives and was therefore eliminated from consideration in this Draft EIR.

Alternative 1: 230/12-kV Substation and 230-kV Loop-In, would require similar energy use to the proposed project; however, the duration of construction would be longer. Energy consumption from construction of Alternative 1 would be approximately 20 percent greater than the proposed project. Energy consumption during operation and maintenance of the substation would be similar to the proposed project.

Alternative 2: 69/12-kV Substation and Generation at Border and Larkspur Electric Generating Facilities, may result in a less efficient delivery of energy because it would require the equivalent of seven additional hours energy production and dispatch to meet the electrical needs of the area in the absence of a new power line. Alternative 2 would require SDG&E to purchase approximately 2 to 3 percent more power from the Border facility and the Larkspur Energy Facility than the proposed project.

Alternative 3: 69/12-kV Substation and Underground 69-kV Power Line within Public ROW, would require similar energy consumption to the proposed project; however, construction of the underground power line would require additional energy use. Energy consumption from construction of Alternative 3 would be approximately 30 percent greater than the proposed project. Energy consumption during operation and maintenance of the substation and underground power line would be similar to the proposed project.

The No Project Alternative would result in less efficient delivery of energy as SDG&E redispatches electricity to attempt to cure or avoid power outages.

7.6 EFFECTS NOT FOUND TO BE SIGNIFICANT

CEQA Guidelines Section 15128 requires a brief discussion of resource topics that were not discussed in detail in the EIR. An IS completed for the proposed project determined that there would be no significant effects to Population and Housing and Mineral Resources. The reasoning for the determination is discussed below.

7.6.1 Mineral Resources

There are no known mineral resources within the project area. The project would be located on land classified as mineral resource zone (MRZ) 3 (CDC 1996). MRZ-3 lands consist of areas containing mineral deposits, the significance of which cannot be evaluated from available data (CDC 2013). The proposed substation site would be located within an undeveloped portion of land classified as MRZ-3, and the rest of the project would be located within developed areas of MRZ-3 lands. Therefore, the project would not result in the loss of a known mineral resource and would not result in the loss of availability of a locally important mineral resource recovery site. There would be no impact.

7.6.2 Population and Housing

Construction of the project would not include construction of new homes or businesses, land use changes, or infrastructure extensions that would directly or indirectly induce population growth in the area. The proposed project is designed to meet existing and planned future electrical loads.

Project Construction

Project construction would not indirectly induce population growth. Construction of the proposed project is anticipated to take approximately 18 to 24 months and would require up to 91 workers per day during peak construction periods. The increased demand for construction workers would be temporary and would not induce substantial population growth in the area. There are sufficient underemployed construction workers in the County to supply workforce for the project. The majority of crew members would commute from surrounding areas and are expected to be San Diego County residents because the project is located in an urban area with easy access from nearby communities. No new housing would need to be built for temporary construction workers. Construction of the project would not induce population growth, either directly or indirectly. There would be no impact related to population growth.

Operation and Maintenance

No long-term employment opportunities would be created by the proposed project. The proposed substation would be unattended and remotely operated and it would not require dedicated, full-time personnel. Routine operations would require one or two workers to visit the substation on a weekly basis. Routine maintenance visits to the substation would require two to four workers and would consist of up to six trips per year. Routine operation and maintenance would be conducted by SDG&E staff already located in the area. As described in Section 7.1.2, provision of electricity is not removal of a barrier to growth; the project would supply power to projects that are already under construction or approved by the City and

included in the City General Plan. Operation and maintenance would not induce population growth, either directly or indirectly. There would be no impact from operation and maintenance related to population growth.

The proposed project would be constructed on vacant land that is either owned by SDG&E or within existing SDG&E easements, with the exception of the Hunte Parkway staging yard and alternative staging yards at the Olympic Training Center. The staging yards would be used only temporarily. Housing is not present within the project area. The project would not displace people or housing. No impact would occur.