7. CUMULATIVE AND GROWTH-INDUCING IMPACTS

7.1 INTRODUCTION

This section discusses potential growth-inducing and cumulative impacts related to the construction, operation, and maintenance of the proposed project. CEQA and CPUC Rule 17.1 require a discussion of the cumulative effects of the project with other closely related past, present, and reasonably foreseeable projects and their potential to result in significant cumulative effects. CEQA also requires a discussion of the ways in which the proposed project, along with other reasonably foreseeable actions or projects, could foster economic or population growth, either directly or indirectly, in the surrounding environment.

With the potential exception of certain access roads, the Miguel–Mission 230kV #2 Project would be constructed entirely within SDG&E's existing right-of-way. The project would also use existing access roads and existing transmission structures to the greatest extent feasible when installing the new 230kV circuit, relocating the 69kV/138kV circuits, and making substation modifications. Implementation of the project in this manner would result in minimal impacts to the environment during construction, operation, and maintenance. As a result, the project would not contribute substantially to the cumulative impacts of other reasonably foreseeable projects within the project area. The project is proposed to reduce potential for transmission line constraints on SDG&E's existing transmission system. As described in the following sections of this chapter, construction, operation, and maintenance of the proposed project would not contribute to any significant growth-inducing or cumulative physical environmental impacts.

7.2 CUMULATIVE IMPACTS

CEQA requires the consideration of cumulative impacts when the incremental impacts of an action, combined with other past, present, and reasonably foreseeable actions, would have significant cumulative effects. Cumulative impacts can result from individually minor but collectively significant actions occurring over a period of time. The impacts of past and present actions within an environment combine to form that environment's existing conditions.

7.2.1 Analysis of Cumulative Impacts

Because the project would not significantly affect the resources listed below, it would not contribute to a cumulative effect to:

- Hazards and Hazardous Materials
- Mineral Resources and Paleontology
- Population and Housing
- Public Services, Utilities, and Service Systems
- Recreation and Agricultural Resources
- Transportation and Traffic

Cumulative and Growth-Inducing Impacts

The project does have the potential to result in cumulative impacts to:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hydrology and Water Quality
- Land Use and Planning
- Noise

The following sections fully discuss these impacts. A map detailing planned and proposed new development in the area appears as Figure 7-1.

Timeframe for Analysis

For the purposes of this cumulative effects analysis, the project is defined in terms of construction duration and postconstruction restoration, operation, and maintenance. Construction of the project is anticipated to take approximately two years and is currently scheduled to begin in June 2003. Postconstruction habitat restoration likely would occur over a period of one growing season following completion of construction. Mitigation monitoring and maintenance of the restored areas would continue for a period of three to five years following completion of the project.

Area of Analysis

The area for which potential cumulative impacts of the project were considered was limited to within approximately 4 miles of SDG&E's existing right-of-way, because it is anticipated that potential project impacts would not extend farther than this distance. A number of other existing and reasonably foreseeable projects are located within a 4-mile vicinity of the SDG&E's proposed project, as shown in Table 7-1.

Methodology

To identify reasonably foreseeable actions or developments within 4 miles of the proposed project, discussions were held with the cities of Santee, El Cajon, and San Diego and with San Diego County. In addition, developers of some of the projects identified by local jurisdictions were contacted to provide more specific information about their plans.

Existing/Operating Projects

The only existing projects in the area are the gravel mining operation located immediately east of the Mission Substation, and the ongoing maintenance of various existing public and private infrastructure improvements. The mining operation has increased air emissions, noise, and visual impacts in the project area. The ongoing infrastructure maintenance creates periodic short-term air and noise emissions. During construction, the project would have a short-term contribution to

Figure 7-1 Planned and Proposed Projects (see link on contents page)

Project/Development	Location	Proximity to Project	Description (no. of units, etc.)	Status (planned, pending, approved)	Anticipated Construction Date
Ames Ranch	San Diego County, northwest of Canyon Corral Road and Central Avenue intersection	Within 2 miles, east of Miguel Substation	9.56 acres; 21- lot subdivision	Approved	Grading scheduled to start in May 2002
Hillside Ranch	San Diego County, on Hillsdale Road, 0.25 mile west of Hidden Mesa Road	Between Miguel Substation and Los Coches Substation, within 1 mile, west of project area	65 acres	Approved	Under construction
Priest Development	City of El Cajon, 1933– 1957 Granite Hills Drive	Between Miguel Substation and Los Coches Substation, within 1 mile, west of project area	17 lots	Approved July 2000	Unknown
Pacific Scene Homes	City of El Cajon, 1942 Valley View Boulevard	Between Miguel Substation and Los Coches Substation, within 1 mile, west of project area	15 lots; single- family homes	Approved	Under construction

Table 7-1: Planned and Proposed Projects

Project/Development	Location	Proximity to Project	Description (no. of units, etc.)	Status (planned, pending, approved)	Anticipated Construction Date
Teatro	City of El Cajon, 1470 Broadway Avenue and 3 rd Street	Between Miguel Substation and Los Coches Substation, within 2 miles, west of project area	91 homes	Approved December 2000	Unknown
Ferry Ranch	San Diego County, southeast intersection of Oak Creek Drive and Palm Row Drive	Between Los Coches Substation and Fanita Junction, within 0.5 mile, south of the project	41 lots	Approved	Under construction
Town Center Community Park	City of Santee, intersection of Center Parkway and Civic Center Drive	Between Los Coches Substation and Fanita Junction, within 3 miles, south of project area	50 acres; currently building aquatic center	Approved	Under construction
Santee Lakes Regional Park and Campground	City of Santee, 9040 Carlton Oak Drive	Between Los Coches Substation and Fanita Junction, within 1 mile, south of project area	190 acres; 120 new hookup sites	Approved	2002–2003
Fairfield Residential	City of San Diego, Kearny Mesa, southeast of State Route 163 and Clairemont Mesa Boulevard	Near Mission Substation, within 2 miles, northwest of project area	448 units; 24 per acre	Approved	Under construction

Project/Development	Location	Proximity to Project	Description (no. of units, etc.)	Status (planned, pending, approved)	Anticipated Construction Date
The Promenade— Residential and Retail	City of San Diego, Mission Valley, southwest of Qualcomm Way and Friars Road	Within 1 mile, southwest of Mission Substation	Approximately 1,000 units	Approved	Under construction
Rio Visa West Residential—River Front Project	City of San Diego, Mission Valley, west side of Qualcomm Way, south side of Rio San Diego Drive	Within 1 mile, southwest of Mission Substation	190 units; 40 units per acre	Approved	Unknown
Mission City North Residential	City of San Diego, Mission Valley, north side of Friars Road, west of Mission Village Drive	1.25 miles southwest of Mission Substation	1,180 dwelling units	Approved	Under construction
Mission Village Mixed-use and Residential and Retail	City of San Diego, Serra Mesa, northeast corner of Gramercy Road and Ruffin Road	Near Mission Substation, within 1mile, northwest of project area	184 units; 29 units per acre; 11,900 square feet of retail	Approved	Under construction
Second Street Widening	City of El Cajon, less than 0.25 mile south of Interstate 8	Between Miguel Substation and Los Coches Substation, within 2 miles, west of project	Widening of Second Street	Approved	Under construction

Project/Development	Location	Proximity to Project	Description (no. of units, etc.)	Status (planned, pending, approved)	Anticipated Construction Date
Mission Valley East LRT	City of San Diego and La Mesa, from Interstate 15 to Baltimore Drive	Near Mission Substation, within 0.5 mile southeast of project	New light-rail transit	Approved	Under way; completion targeted for 2004
Vulcan Materials Company and Hanson Aggregates Mining Operation	City of San Diego, Mission Valley, north of Friars Road between Mission Center Road and Interstate 805	Within 1 mile, southwest of Mission Substation	240 acres of aggregate mining	Approved	Operating
The Pointe San Diego	San Diego County, within 0.25 mile southeast of State Route 54 and Sweetwater Springs Boulevard intersection	Between Miguel Substation and Los Coches Substation, within 1.5 miles, west of project area	111 condos	Pending approval	September 2002
Sandera	San Diego County, northeast of Steele Road and Via Caliente del Sol Road intersection	Between Miguel Substation and Los Coches Substation, within 0.5 mile, east of project area	80.84 acres; 15 lots	Processed 8/28/98; pending approval	Unknown
Dawson Subdivision	San Diego County, within 0.25 mile, southeast of Vista Grande Road and Hidden Mesa Road	Between Miguel Substation and Los Coches Substation, within 1 mile, west of project area	13.95 acres; 23 lots	Processed 1/27/99; pending approval	Spring 2003

Project/Development	Location	Proximity to Project	Description (no. of units, etc.)	Status (planned, pending, approved)	Anticipated Construction Date
Rios Canyon Ranch	San Diego County, less than 0.25 mile south of Olde Highway 8 and Jennings Park Road junction	Between Miguel Substation and Los Coches Substation, within 0.25 mile east of project area	595 acres; 185 lots	Processed 6/14/99; pending approval	2004 or later
Cheryl Valley	San Diego County, between Jennings Park Road and Los Coches Road	Between Miguel Substation and Los Coches Substation, extends into project corridor	25 acres; 73 lots	Processed 12/18/98; pending approval	Unknown
Chimney Rock Subdivision	San Diego County, northwest of Chimney Rock Road and Olde Highway 8 intersection	Between Miguel Substation and Los Coches Substation, within 2 miles, east of project area	11 lots	Processed 1/03/00; pending approval	2003
Adlai Ranch Estates	San Diego County, between Jennings Park Road and Los Coches Road	Between Miguel Substation and Los Coches Substation, project extends into project corridor	9.55 acres; 22-lot subdivision	Processed 10/25/99, pending approval	Unknown

Project/Development	Location	Proximity to Project	Description (no. of units, etc.)	Status (planned, pending, approved)	Anticipated Construction Date
Greenhills Ranch	San Diego County, between Jennings Park Road and Los Coches Road	Between Miguel Substation and Los Coches Substation, within 0.25 mile, west of project area	92 acres; 35 lots	Processed 4/16/99; pending approval	Unknown
Blossom Valley Ranch	San Diego County, northwest of Blossom Valley Road and Flinn Springs Road intersection	Between Miguel Substation and Los Coches Substation, within 2 miles, east of project area	65 acres; 25 lots	Processed 3/8/00; pending approval	Unknown
Leung TM	San Diego County, Park Road at Lake Jennings	Within 1 mile, northwest of Los Coches Substation	17.15 acres; 37 lots	Processed 4/15/99; pending approval	Spring 2003
Pinery East	San Diego County, within 0.5 mile, southeast of Riverford Road and Riverside Drive intersection	Between Los Coches Substation and Fanita Junction, within 2 miles, south of the project	3.56 acres; 15 lots	Processed 11/5/01; pending approval	September 2002

Project/Development	Location	Proximity to Project	Description (no. of units, etc.)	Status (planned, pending, approved)	Anticipated Construction Date
Lakeside Investment	San Diego County, within 0.75 mile, southeast of Riverford Road and Riverside Drive intersection	Between Los Coches Substation and Fanita Junction, within 2 miles, south of the project	148-lot subdivision	Processed 4/4/00; pending approval	Unknown
Dakota Ranch	City of Santee, intersection of Princess Joann Street and Cuyamaca Street	Between Los Coches Substation and Fanita Junction, within 0.5 mile, south of project area	20 single- family residences	Pending approval	Unknown
Rio Vista West— Urban Residential Project	City of San Diego, Mission Valley, Rio Vista West, west side of Qualcomm Way	Within 1 mile, southwest of Mission Substation	190 units; 41 units per acre	Pending approval	Unknown

Project/Development	Location	Proximity to Project	Description (no. of units, etc.)	Status (planned, pending, approved)	Anticipated Construction Date
Quail Canyon Estates	San Diego County; northeast of intersection of Quail Canyon Road and Furnace Canyon Road	Between Miguel Substation and Los Coches Substation, within 2 miles of project area	255.21 acres; 17 lots	Processed 5/28/99; pending approval	Unknown
Jamacha Boulevard Widening	City of El Cajon, approximately 1 mile south of Interstate 8	Between Miguel Substation and Los Coches Substation, within 1 mile, west of project	Widening of Jamacha Boulevard	Pending approval	2003
Interstate 8 Widening Project	City of San Diego, between Waring Road and College Boulevard	Between Fanita Junction and Mission Substation, within 2 miles, southeast of project	Widening of the eastbound lanes on Interstate 8	Pending approval	2006
Friars Road Interchange Modification	City of San Diego, 0.5 mile north of Interstate 8	Near Mission Substation, within 0.5 mile southeast of project area	Upgrade of interchange at Friars Road	Pending approval	2003

Project/Development	Location	Proximity to Project	Description (no. of units, etc.)	Status (planned, pending, approved)	Anticipated Construction Date
San Diego River Park—Lakeside Conservancy	San Diego County, northwest of the Riverford Road and State Route 67 intersection	Between Los Coches Substation and Fanita Junction, within 2 miles, south of project area	25 to 400 acres (depending on land acquisition)	Planned	Unknown
Toll Highway 125	San Diego County, from State Route 905 to San Miguel Road	Within 1 mile, southwest of Miguel Substation	New four-lane toll way	Planned	2004
Los Coches Interchange Modification	San Diego County, intersection of Los Coches Road and Interstate 8	Between Miguel Substation and Los Coches Substation, within 1 mile, west of project	Upgrade of interchange at Los Coches Road	Planned	2005
State Route 52 Lateral #1	City of Santee, from State Route 125 to Cuyamaca Street	Between Fanita Junction and Los Coches Substation, within 2 miles, south of project	New four-lane freeway section	Planned	2006
State Route 52 Lateral #2	City of Santee, from Cuyamaca Street to State Route 67	Between Fanita Junction and Los Coches Substation, within 2 miles, south of project	New four-lane freeway section	Planned	2009

Project/Development	Location	Proximity to Project	Description (no. of units, etc.)	Status (planned, pending, approved)	Anticipated Construction Date
Interstate 15 Widening Project	City of San Diego, between Friars Road and Interstate 8	Near Mission Substation, within 0.25 mile of project area	Widening of the southbound lanes on Interstate 15	Planned	2003
Mission Gorge Road Widening	City of Santee, between Cuyamaca Street and Magnolia Avenue	Between Fanita Junction and Los Coches Substation, within 2 miles, south of project	Widening of Mission Gorge Road	Planned	2002

existing cumulative air and noise impacts of these ongoing mining and infrastructure maintenance activities. However, the cumulative impacts of the project would be temporary, short term, and considered less than significant. The new 230kV circuit would be installed on modified existing structures, and the relocated 69kv/138kV circuit would be constructed parallel to other existing lines within the existing right-of-way. Therefore, the project's permanent visual impacts would be incremental and minor, and the overall existing visual quality of the project area would not be significantly impacted by the cumulative addition of the new transmission facilities within the existing right-of-way.

Projects Under Construction and Planned/Future Projects

Several projects under construction in the project area will be completed before the proposed Miguel–Mission 230kV #2 Project, which would commence construction in June 2003. At least three reasonably foreseeable projects will be constructed after SDG&E's proposed project would be completed in June 2005. As a result, construction of the Miguel–Mission 230kV #2 Project would not contribute to a significant cumulative impact when combined with the potential impacts of the projects to be completed before June 2003 and those planned for construction after 2005. Construction of approximately 11 of the projects listed in Table 7-1 would occur during the same timeframe as the Miguel–Mission 230kV #2 Project. Potential cumulative impacts may occur to the following resources as a result of construction of the project in conjunction with other planned and future projects.

Aesthetics

The project would not contribute to significant cumulative aesthetic effects because it would be located within SDG&E's existing right-of-way. The new 230kV circuit would be constructed primarily on existing structures, and the relocated 69kV/138kV circuits would be built parallel to existing lines within the same existing right-of-way. Although other reasonably foreseeable projects in the area may have the potential to impact some visual resources, these projects are all visually compatible with the existing character of the area and should not contribute to a significant cumulative impact. Even when considered in conjunction with other reasonably foreseeable projects, SDG&E's proposed project would not contribute to a significant cumulative effect to aesthetics.

Air Quality

Construction of SDG&E's proposed project would result in short-term, temporary air emissions that are not expected to violate air quality standards for the region. Effective dust control measures would be employed throughout construction, minimizing the potential for even a minor air quality impact. Operation of the project would result in minimal air emissions from maintenance vehicles and activities. As a result, the project would not contribute significantly to a cumulative effect to air quality in the project area.

Biological Resources

Construction of one or more of the known and reasonably foreseeable projects in the Miguel– Mission 230kV #2 Project area may have the potential to cumulatively impact habitat values for wildlife and native plants, and may disturb existing vegetation in the general area. However, potential impacts to vegetation and wildlife from construction of SDG&E's proposed project would be mostly temporary and short term. There is potential for the sensitive species located in or adjacent to the project area to be affected by project construction (refer to Section 6.3). However, the siting of the project in an existing SDG&E right-of-way would avoid or minimize potential impacts to large areas of habitat. With implementation of the Project Protocols and mitigation measures, the potential for permanent impacts to biological resources would be less than significant. It is expected that the project would not significantly contribute to a cumulative effect to biological resources.

Cultural Resources

The project is not anticipated to have significant impacts to cultural resources, particularly because ground disturbance and excavation associated with the project would be limited. There is potential to discover cultural resource impacts at new pole locations for the 69kV/138kV circuits where excavations would be required for pole footings. However, a previously conducted records search identified no known historical resources or human remains in the project area. Cultural resource field surveys being conducted for the entire right-of-way to identify locations of any potential cultural resources.

Construction, operation, and maintenance of the project would not result in a substantial change in significance of a historical resource. Potential impacts to cultural sites are anticipated to be insignificant and would not contribute substantially to a significant cumulative effect to cultural resources. If any eligible resources were discovered, investigation, protection and/or curation measures would be required to mitigate any potential effects to those eligible resources. Through this process and the implementation of Project Protocols, the project is not expected to contribute to a significant cumulative impact upon local and regional cultural resources.

Geology and Soils

The construction of SDG&E's proposed project and other reasonably foreseeable projects would involve potential soil disturbance in the project area. However, construction of the project would involve minimal soil disturbance at isolated locations, such as structure foundations, temporary construction areas, and new spur roads. These potential impacts would be primarily temporary and primarily short term. In addition, Project Protocols would reduce these impacts so that they would not contribute to a significant cumulative effect.

Hydrology and Water Quality

Potential cumulative impacts to water resources from SDG&E's proposed project and other reasonably foreseeable projects/developments in the vicinity could occur as a result of sediment or pollution discharges to waterways or disturbance to wetlands. However, because the project would not permanently impact water resources (refer to Section 6.7) and would incorporate Project Protocols to reduce any potential water quality impacts to a level of insignificance, any potential temporary short-term impacts of the project would be minimal and would not contribute to a significant cumulative impact on water resources in the area.

Land Use and Planning

All of the reasonably foreseeable projects identified in the Miguel–Mission 230kV #2 Project area would have the potential to reduce the amount of land available for future development or other land uses. As a land use, the temporary and net permanent land disturbances of an upgrade to an existing electric transmission line would be small compared to those of most land development projects. Both the new 230kV circuit and the relocated 69kV/138kV circuits would be sited in SDG&E's existing right-of-way in an area where land development is already limited. As a result, the project would not contribute to a significant cumulative impact to land use or planning in the project area.

Noise

All noise-related impacts from project construction, operation, and maintenance would be short term and temporary and considered less than significant. Because the project is located at least 0.25 mile from most other reasonably foreseeable projects that would be constructed at the same time in the project area, as listed in Table 7-1, the project would not contribute substantially to a significant cumulative noise impact. An incremental long-term noise impact associated with the proposed project is corona effect, which manifests as random crackling or hissing sounds around high voltage powerlines. Corona discharges from operation of the new 230kV circuit may result in a minimal, incremental increase in existing ambient noise levels, specifically during weather conditions associated with fog and/or rain. Implementation of Project Protocols would minimize the level of audible noise generated from corona. Because corona effects would be minimal and brief in duration, no significant long-term contributions to cumulative impacts would result.

Conclusion

A majority of the project's potential to contribute to significant cumulative impacts would be limited in scale, temporary, and short term. Because approximately only one-fourth of the 44 reasonably foreseeable projects listed in Table 7-1 would occur at the same time as the proposed Miguel–Mission 230kV #2 Project construction phase, and because construction of the project would take place only for a limited time at any given section of the right-of-way, cumulative impacts resulting from the project would be limited. In addition, because the Miguel–Mission 230kV #2 Project would involve limited impacts over a relatively short period at any one construction site and with the exception of certain access roads would occur within SDG&E's existing, developed right-of-way, the project is not likely to contribute to a significant cumulative effect to the environment and existing resources in the project area. Moreover, under CEQA, these projects would be required to implement mitigation measures to reduce any significant impacts to a less than significant level.

7.3 GROWTH-INDUCING IMPACTS

The proposed project would not directly or indirectly foster growth or remove obstacles to economic or population growth in the area. The project is designed to deliver significant economic benefits to SDG&E and CAISO customers by removing electric transmission constraints (i.e., relieving congestion on SDG&E's electric transmission system to accommodate increased power flow from new and existing generators) to meet CPUC-mandated criteria to

provide safe, cost-effective, continuous and reliable service, to promote competition, to increase system reliability, and to avoid electric transmission capacity shortfalls during periods of peak demand.

SDG&E calculated annual energy cost deductions to both SDG&E and CAISO statewide ratepayers under two scenarios, one with new generation development exceeding approximately 1,350 MW and the other at approximately 3,800 MW. The annual energy cost would decrease as a result of lower market prices for the commodity, by 6 million (SDG&E ratepayers) and 13 million dollars (CAISO ratepayers). In the second scenario, the annual energy costs to SDG&E and to CAISO customers, is projected to decrease by 33 million dollars and 181 million dollars, respectively. Although this project has the potential to deliver significant economic benefits to existing SDG&E customers, any effect on indirect growth in the project area in general likely would be minimal.

7.3.1 New Employment

SDG&E would employ approximately 25 to 35 workers at any given project phase, using local resources to the extent feasible, on the various job sites during the two-year construction period. Existing SDG&E employees would be used for ongoing operation and maintenance of the project; no new permanent employees would be required.

7.3.2 Extended Access or Public Services

With the exception of certain access roads, the project's proposed electric transmission facilities would be located within the existing right-of-way and existing fenced substation sites occupied by similar electric transmission facilities. The project would neither extend new electrical service and utilities to areas or individuals not served in SDG&E's service territory nor require the extension of other public services to previously unserved areas.

7.3.3 Existing Community Services

The project would not tax existing community services. The project's need for city- and countyprovided services, such as law enforcement and fire protection, would be very infrequent. Operation of the project would not require the hiring of additional police and fire protection personnel.

7.3.4 New Development

The project would not generate new development. The proposed project is designed to reduce potential transmission congestion, improve current system reliability, and reduce the cost of delivery of electrical power needed to meet existing demand rather than to induce new growth or development.