5.16 ELECTRICITY

This section addresses the potential impacts of the proposed project with regard to electricity consumption during construction and operation. The analysis identifies the utility that provides electricity services to the project site, describes the existing consumption of electricity at the site, indicates the nature and location of related infrastructure in the local area, and estimates the electricity demands of the proposed project at buildout.

5.16.1 ENVIRONMENTAL SETTING

REGULATORY FRAMEWORK

The California Public Utilities Commission (CPUC) regulates investor-owned electric power and natural gas utility companies in the State of California. Assembly Bill 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that was under the control of investor-owned utilities (e.g., Southern California Edison) was decoupled.

All new construction in the State of California is subject to the energy conservation standards set forth in Title 24, Part 6, Article 2 of the California Administrative Code. These are prescriptive standards that establish maximum energy consumption levels for the heating and cooling of new buildings.

The utilization of alternative energy applications in development projects (including the proposed project), while encouraged, is not required as a development condition. Such applications may include installation of photovoltaic solar panels, active solar water heating systems, or integrated pool deck water heating systems, all of which serve to displace consumption of conventional energy sources (i.e., electricity and natural gas). Incentives, primarily in the form of state and federal tax credits, as well as reduced energy bills, provide a favorable basis for individual builders, property owners, and occupants to install such alternative energy systems.

ELECTRICITY SUPPLY AND DEMAND

Southern California Edison (SCE), a division of Edison International, currently provides electricity service in the project area. Edison facilities include a hydropower and nuclear power facilities and one coal-powered facility: the Big Creek Hydroelectric Plant, the San Onofre Nuclear Generating Station (SONGS), and the Mojave Generating Station. SCE maintains and operates transmission and distribution infrastructure to provide purchased power to end users throughout its service area.

According to the California Energy Commission (CEC), SCE is projected to deliver 100.8 million megawatt-hours (MWh) to its customers during 2004.[1] By 2010, SCE's demand is expected to increase to 113.1 million MWh. [2]

Existing electric lines within the project area include underground and above ground 16 kilovolt (kV) lines that extend along The Old Road.

5.16.2 SIGNIFICANCE THRESHOLD CRITERIA

Appendix G of the CEQA Guidelines contains the Initial Study Environmental Checklist form used during preparation of the project Initial Study, which is contained in Appendix A of this EIR. The Initial Study includes questions relating to electrical service and facilities. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if one or more of the following occurs:

- The project would create demands on electricity supply and infrastructure which exceed the capacity of the utility serving the project site.

5.16.3 IMPACTS AND MITIGATION MEASURES

◆ ***IMPLEMENTATION OF THE PROPOSED PROJECT WOULD INCREMENTALLY INCREASE DEMANDS ON ELECTRICITY SUPPLIES AND DISTRIBUTION INFRASTRUCTURE.***

Level of Significance Prior to Mitigation: Less Than Significant Impact.

Impact Analysis: The proposed project would result in the construction and operation of 190 residential dwelling units. As shown in Table 5.16-1, Project Electricity Consumption, development of proposed uses would result in the consumption of approximately 1,069 MWh of electricity per year. As previously discussed, SCE deliveries are expected to be 113.1 million MWh per year by project buildout in approximately 2010. As such, the project-related electricity demand would represent only 0.00095 percent of SCE's annual power deliveries.

According to SCE, there are 16 kilovolt (kV) lines that extend underground along The Old Road that would serve the proposed project. These existing pipelines are considered adequate to serve the project's electricity demands. The electrical loads of the proposed project are within the parameters of projected load growth, which SCE is planning to meet in the area.[3] All on-site

1 California Energy Commission. California Energy Demand 2000-2010. Technical Report to California Energy Outlook 2000. Docket #99-CEO-1. June 2000.

2 Ibid.

3 Per written communications with Joe Montoya, Customer Service Planner with Southern California Edison on September 13, 2004.

electricity lines would be installed to serve proposed uses, at the expense of the project applicant. No other improvements related to electricity are necessary.

Table 5.16-1
Project Electricity Consumption

Land Use	Development Statistics [1]	Consumption Factor [2]	Electricity Consumption
Residential	190 d.u.	5,626.5 kWh/d.u./year	1,069 MWh/year
Total			*1,069 MWh/year*

Notes: kWh = kilowatt-hour s.f. = square feet d.u. = dwelling unit MWh = Megawatt-hour
1) Development statistics provided by Western Pacific Housing, Lyons Canyon, LLC. Retail factor used for 22,000 s.f. of Shopping Center and Gas Station/Convenience Market with 12 vehicle fueling positions. Shopping Center, Restaurant, and Gas Station uses the maximum buildable area on the project's commercial planning areas, which totals 24,500 square feet.
2) Consumption factors from South Coast Air Quality Management District *CEQA Air Quality Handbook* (April 1993).

Although the proposed project would create additional demands on electricity supplies and distribution infrastructure, these demands are well within the service capabilities of SCE. Thus, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

5.16.4 CUMULATIVE IMPACTS AND MITIGATION MEASURES

◆ ***DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND RELATED PROJECTS WOULD INCREMENTALLY INCREASE DEMANDS ON ELECTRICITY SUPPLIES AND DISTRIBUTION INFRASTRUCTURE.***

Level of Significance Prior to Mitigation: Less Than Significant Impact.

Impact Analysis: The proposed project and related projects would result in the construction and operation of single and multi-family residential dwelling units, as well as office, retail, industrial, and educational uses, all of which would consume electricity. Development of the proposed project and related projects would result in the consumption of approximately 106.9 MWh of electricity per year. As previously discussed, SCE deliveries are expected to be 113.1 million MWh per year by 2010. As such, the cumulative electricity demand would represent 0.00095 percent of SCE's annual power deliveries.

It is expected that the electrical loads of the proposed project and related projects are within the parameters of projected load growth, which SCE is planning to meet in the area. All electricity lines and other system improvements would be installed, in whole or in part, at the expense of development project applicants, and would serve to avoid adverse impacts to the electricity distribution system.

Although the proposed project and related projects would create additional demands on electricity supplies and distribution infrastructure, these demands are well within the service capabilities of SCE. Thus, cumulative impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

***Level of Significance After Mitigation*:** Less Than Significant Impact.