

Section 5.15
ELECTRICITY





5.15 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.

5.15.1 ENVIRONMENTAL SETTING

ELECTRICITY

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 102.1 million megawatt-hours (MWh) to its customers during 2007.¹ By 2016, SCE's demand is expected to increase to 113.4 million MWh.²

Based upon a consumption factor of 21.7 kWh per square foot per year (kWh/s.f./year), the existing HMNMH campus is projected to utilize approximately 7,380 MWh of electricity per year of electricity. This represents approximately 0.007 percent of SCE's projected electricity deliveries for 2007.

5.15.2 SIGNIFICANCE THRESHOLD CRITERIA

The City of Santa Clarita Local CEQA Guidelines (Resolution 05-38) adopted on April 26, 2005, as well as the City's General Plan and Municipal Code serve as the basis for identifying thresholds determining the significance of the environmental effects of a projects. Where thresholds are not specifically identified, the Initial Study checklist contained in Appendix A of this EIR relating to electrical service and facilities have been utilized to formulate additional significance criteria in this section. Accordingly, a project may create a significant environmental impact if the following occurs:

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

The proposed HMNMH Master Plan has been evaluated based on this standard. Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.15.3 IMPACTS AND MITIGATION MEASURES

ELECTRICITY SUPPLIES AND DISTRIBUTION INFRASTRUCTURE

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

Impact Analysis: Upon buildout of the proposed HMNMH Master Plan, the HMNMH facility would require approximately 7,104 MWh per year more of electricity, for a total demand of 14,484 MWh per year, as shown in Table 5.15-1, Project Electricity Consumption. Since electricity demand has not been estimated yet for project buildout and in order to provide a conservative analysis, total demand for the proposed project has been compared to the demand estimated for Year 2016. As previously discussed, SCE is expected to deliver a total of 113.4 million MWh of electricity for Year 2016. The increase of 7,104 MWh of electricity would only total approximately 0.006 percent of the 2016 electricity demand.

¹ California Energy Commission. *California Energy Demand 2006-2016 Staff Energy Demand Forecast Revised September 2005*. Staff Final Report.. Publication #CEC-400-2005-034-SF-ED2. September 2005.

² *Ibid.*



According to SCE, there are 16 kilovolt (kV) lines that extend underground along McBean Parkway that serve the HMNMH campus. These existing transmission lines are considered adequate to serve the project's increased 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 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 5.15-1
Project Electricity Consumption**

Land Use	Development Statistics	Consumption Factor ¹	Electricity Consumption
Existing HMNMH Campus	340,071 s.f.	21.7 kWh/s.f./year	7,380 MWh/year
Proposed HMNMH Plan (net increase)	327,363 s.f.	21.7 kWh/s.f./year	7,104 MWh/year
Buildout of HMNMH Plan	667,434 s.f.	21.7 kWh/s.f./year	14,484 MWh/year
kWh = kilowatt-hour s.f. = square feet MWh = Megawatt-hour			
¹ Consumption factors from South Coast Air Quality Management District <i>CEQA Air Quality Handbook</i> (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, the proposed project would not create demands on electricity supplies and infrastructure that exceed the capacity of the utility serving the project site. Therefore, 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.

5.15.4 CUMULATIVE IMPACTS AND MITIGATION MEASURES

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

Impact Analysis: Development of the proposed project and related cumulative projects would result in the consumption of approximately 376,158 MWh of electricity per year (refer to Appendix C for cumulative electricity consumption calculations). As previously discussed, SCE is expected to deliver a total of 113.4 million MWh of electricity for Year 2016. As such, the cumulative electricity demand would represent 0.33 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

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



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 cumulative projects would create additional demands on electricity supplies and distribution infrastructure, these demands are well within the service capabilities of SCE. As such, cumulative electricity supplies and distribution infrastructure impacts would be less than significant and would not create demands on electricity supply and infrastructure that exceed the capacity of the utility serving the sites.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less Than Significant Impact.

5.15.5 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative electrical service and facility impacts without the imposition of mitigation measures. As such, no significant unavoidable impacts would result from implementation of the Henry Mayo Newhall Memorial Hospital Master Plan.