

Executive Summary

1.1 Project Overview

Valle del Sol Energy, LLC (VSE), a wholly-owned subsidiary of Edison Mission Energy, proposes to construct, own, and operate an electrical generating plant near the unincorporated community of Romoland, Riverside County, California. The Sun Valley Energy Project (SVEP) will be a natural gas-fired, simple-cycle electrical generating facility rated at a nominal net generating capacity of 500 megawatts (MW). The project is proposed for an approximately 20-acre site on Matthews Road near Romoland. The project site is zoned Manufacturing-Service Commercial. Surrounding land uses currently include agriculture, transportation (railroad), industrial, and rural residential.

A parcel map of the SVEP site is attached as Appendix 1A. A list of the property owners located within 1,000 feet of the power plant site or 500 feet of the linears is attached as Appendix 1B. Appendix 1C contains a letter documenting VSE's agreement for the use of the property.

Figure 1.1-1 is an architectural rendering of the project. Figure 1.1-2 shows the location of the project within the project vicinity. Figure 1.1-3 shows the site location. The project is a 500 MW nominal, natural gas-fired, simple-cycle generating plant and will have the following design features:

- Five GE Energy LMS100 combustion turbine-generators (CTGs)
- A five-cell mechanical draft cooling tower, and associated support equipment.
- Selective catalytic reduction (SCR) pollution and carbon monoxide (CO) catalyst air emissions control systems and water-injected combustors.
- A 600-foot-long 115 kV transmission line connected with Southern California Edison's (SCE's) nearby Valley Substation and requiring a single off-site conductor support tower and connection to the south end of the substation.
- A 12-inch-diameter, 750-foot-long connection to Southern California Gas Company's (SoCalGas's) high pressure natural gas pipeline that runs in a utility easement in nearby Menifee Road.
- A 12-inch-diameter, 20-foot-long pipeline to supply reclaimed water from the Eastern Municipal Water District's pipeline that is located in a utility easement immediately north of and adjacent to the project site. Reclaimed water will be used as cooling tower and evaporative cooler makeup water, landscape irrigation water, and demineralizer makeup water.
- A 4-inch-diameter, 20-foot-long connection to an existing sanitary sewer, which is located in a utility easement immediately north of the project parcel.

- A 4-inch-diameter, 20-foot-long pipeline to supply potable water from an existing source located in a utility easement immediately north of the project parcel.
- An 0.75-mile-long, 8-inch-diameter non-reclaimable wastewater pipeline that will run in McLaughlin Road to connect with the Inland Empire Energy Center's non-reclaimable waste water line at McLaughlin and Antelope roads.

1.2 Project Ownership

Valle del Sol Energy, LLC will own the SVEP, and is a wholly-owned subsidiary of Edison Mission Energy (EME). EME is an independent power developer, owner, and operator engaged in the business of owning or leasing, operating and selling energy and capacity from electric power generation facilities. EME was formed in 1986 with two domestic operating power plants. As of March 31, 2005, EME's continuing operations consisted of owned or leased interests in 18 operating power plants with an aggregate net physical capacity of 9,914 MW of which EME's capacity pro rata share was 8,834 MW. Based in Irvine, California, EME had approximately \$6.3 billion in assets as of March 31, 2005.

1.3 Project Schedule

VSE is filing this Application for Certification (AFC) under the California Energy Commission's (CEC) 12-month licensing process. Assuming the project receives a license by December 2006, construction of the SVEP will begin in the early spring of 2007. Pre-operational testing of the power plant will begin in the spring of 2008, and full-scale commercial operation is expected to commence by August of 2008.

1.4 Project Alternatives

A "no project" alternative was considered and rejected. The no project alternative fails to meet the basic project objectives of the SVEP project as described in this AFC. For example, the no project alternative is inconsistent with one of the primary objectives of EME's program to provide electrical power to support reliable supply and provide peaking power in Southern California. In addition, the no project alternative could result in greater fuel consumption and air pollution; because older, less efficient plants with higher air emissions would continue to generate power instead of being replaced with cleaner, more efficient, plants, such as the SVEP. Also, during limited availability of in-state generated electricity, imported electrical energy has proven to be expensive and is not always available.

In addition to the no project alternative, VSE has analyzed two possible alternative power plant sites. Each of these sites was rejected as infeasible because each fails to meet most of the SVEP's project's basic objectives, fails to avoid or minimize potentially significant environmental effects, and/or includes the potential for the alternative itself to result in one or more significant environmental impacts. A complete discussion of project alternatives, including the no project alternative is presented in Section 9.0.

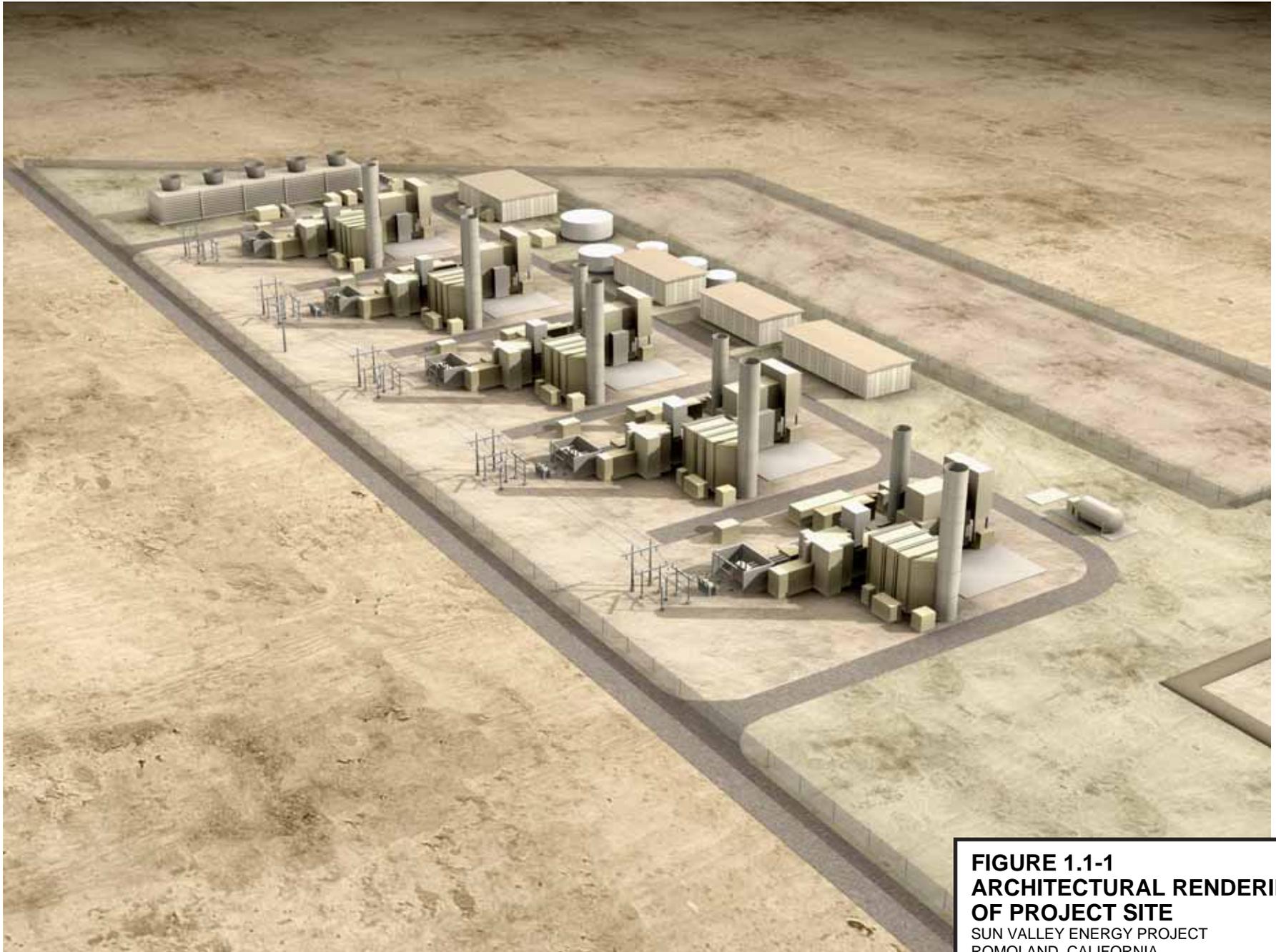
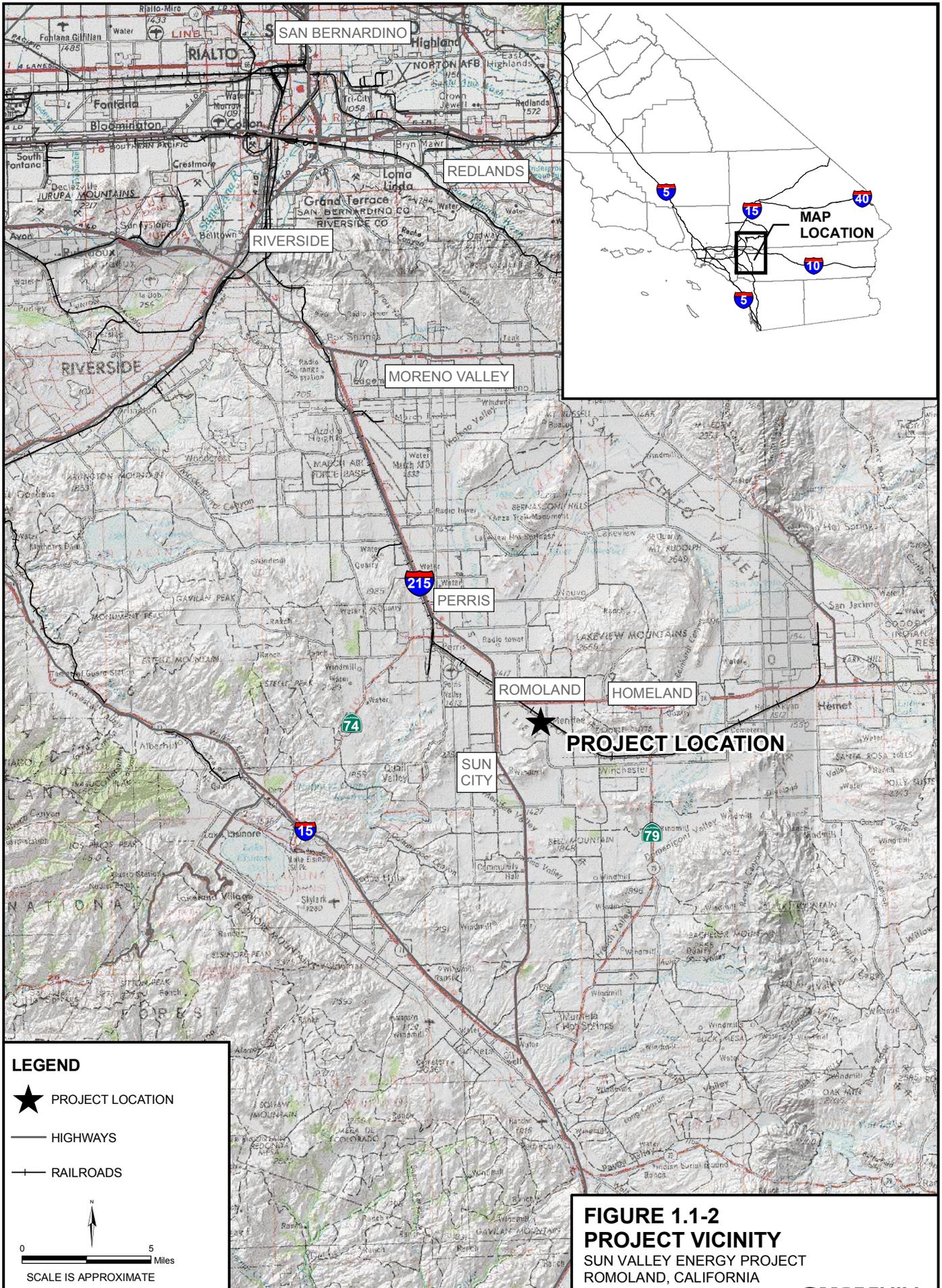


FIGURE 1.1-1
ARCHITECTURAL RENDERING
OF PROJECT SITE
SUN VALLEY ENERGY PROJECT
ROMOLAND, CALIFORNIA

CH2MHILL



LEGEND

- ★ PROJECT LOCATION
- HIGHWAYS
- RAILROADS

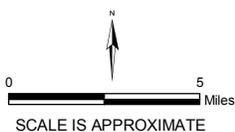
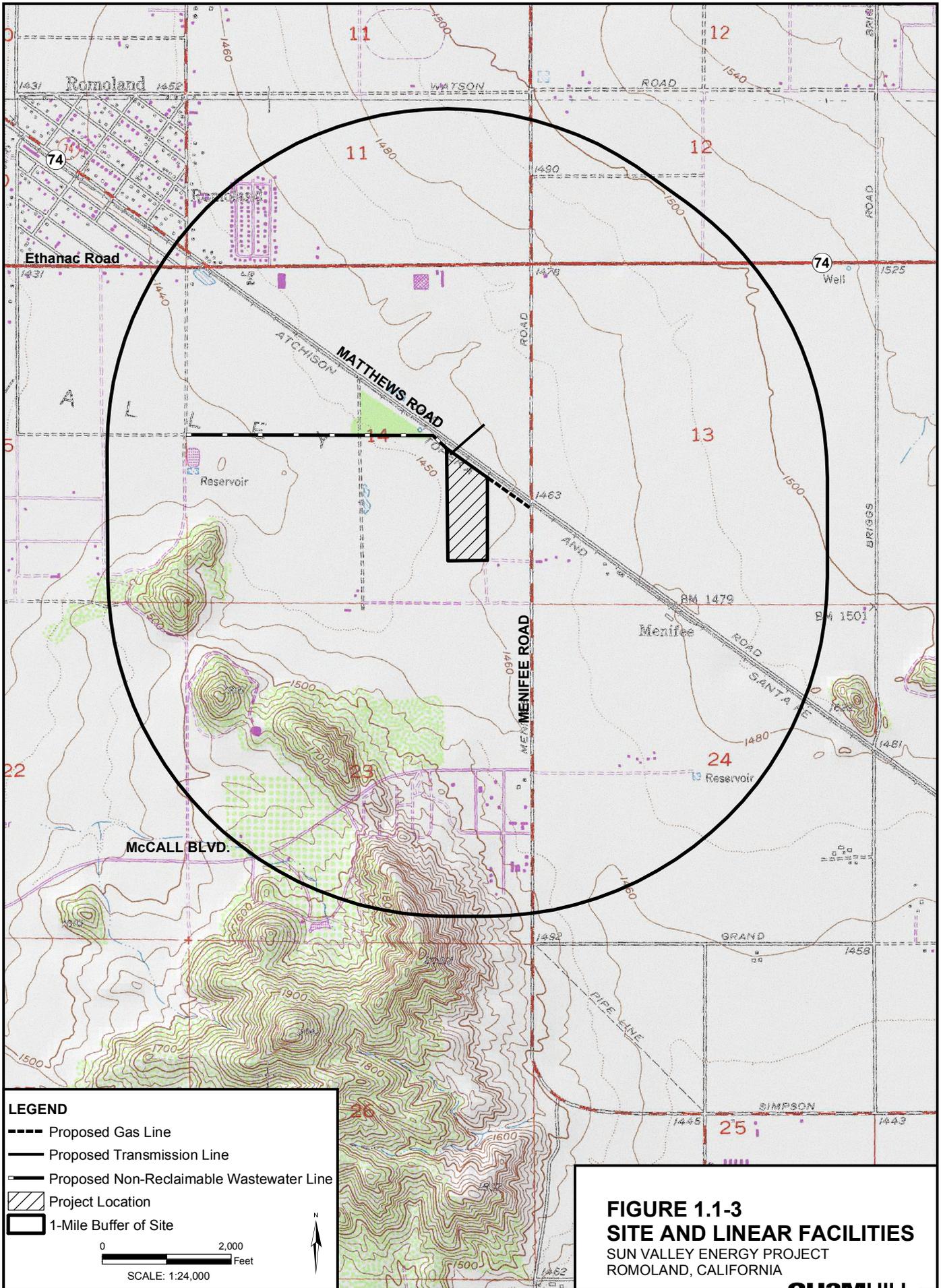


FIGURE 1.1-2
PROJECT VICINITY
 SUN VALLEY ENERGY PROJECT
 ROMOLAND, CALIFORNIA



Alternative routings for the project's linear appurtenances were not considered, because connections to sanitary sewer, potable water, reclaimed water, and fire water are immediately adjacent to the project parcel; the connection to natural gas is only 750 feet and runs entirely on project property; the connection for the non-reclaimable waste water line will run in public right-of-way for a short distance (0.75 mile) by the most direct route; and the SCE Valley Substation is 600 feet from the proposed project.

Several alternative generating technologies were reviewed in a process that resulted in the selection of a state-of-the-art, natural gas-fired combustion turbine power plant for the SVEP. The alternative technologies included conventional oil and natural gas-fired plants, combined-cycle combustion turbines, biomass-fired plants, waste-to-energy plants, solar plants, wind generation plants, and others. None of these technologies was considered better than or equal to the GE Energy LMS100 technology selected for the SVEP in meeting the project goals.

1.5 Environmental Considerations

Pursuant to the requirements set forth in existing environmental laws and the CEC's regulations, 16 areas of possible environmental impact from the proposed project were investigated. Detailed descriptions and analyses of these areas are presented in Sections 8.1 through 8.16 of the AFC. As discussed in detail in this AFC, with the implementation of the proposed mitigation measures and the anticipated Conditions of Certification, there will be no significant unmitigated environmental impacts associated with the construction and operation of the SVEP. This Executive Summary highlights findings related to five subject areas that have historically been of interest in CEC proceedings: air quality, biological resources, noise, visual resources, and water resources.

1.5.1 Air Quality

The SVEP site is located in a State of California and federal Ambient Air Quality Standards non-attainment area for ozone and for particulate matter with a diameter less than 10 microns (PM_{10}), and a federal non-attainment area for CO. The South Coast Air Quality Management District (SCAQMD) has requested re-designation for CO to a status of attainment. An assessment of the impact to air quality was performed using detailed air dispersion modeling. The potential air quality impacts from the SVEP will be mitigated by the installation and operation of Best Available Control Technology (BACT) for the combustion turbines, cooling tower, and support equipment. Emission reduction credits (ERCs) will be obtained to offset the project's emissions of volatile organic compounds (VOC), PM_{10} , and CO. RECLAIM Trading Credits (RTC) will be provided to offset the project's emissions of oxides of nitrogen (NO_x) and sulfur dioxide (SO_2). Offsets for PM_{10} will be obtained from the SCAQMD Priority Reserve. Offsets for VOC and CO may be acquired from the SCAQMD bank, SCAQMD Priority Reserve, or from other sources such as shutdowns, or non-traditional sources of emissions reductions credits. These mitigation measures will result in the project having no significant adverse impact on air quality or public health. See Section 8.1 for a detailed analysis of air quality.

1.5.2 Biological Resources

The project would not cause any adverse impacts to wetlands or biological resources. The project site is currently used for wheat cultivation does not contain wetlands, or suitable habitat for wildlife or rare plants. The natural gas pipeline is approximately 750 feet long and is located in a wheat field adjacent to a railroad right-of-way. The transmission line is 600 feet long and crosses a road, railroad right-of-way, and open field with ruderal vegetation. The non-reclaimable wastewater pipeline crosses the margins of an agricultural field for a short distance and then runs approximately 0.75 miles in an existing roadway. Although there is a seasonal pond that may provide habitat for the vernal pool fairy shrimp near this roadway, avoidance measures will ensure that there are not adverse impacts to the pond. The other off-site linears are all less than 20 feet long and extend into an existing utility corridor. Section 8.2 discusses biological resources.

1.5.3 Noise

Riverside County maintains a daytime preferred standard of 65 decibels, A-weighted (dBA) for stationary noise sources, and a Land Use Compatibility guideline of 60 dBA Day-Night Noise Level (L_{dn}) (54 Equivalent Noise Level [L_{eq}]) for single-family residential areas. The Applicant conducted 25-hour ambient noise monitoring at the project site and also prepared a noise generation model for the SVEP. The modeling shows that noise attributable to the project at the western boundary of the Menifee Valley Ranch subdivision, 1,000 feet east of the project site, will be approximately 54 dBA, thus meeting the County standards. See Section 8.7 for a detailed analysis of project noise.

1.5.4 Visual Resources

The most prominent visual features of the SVEP will be the stacks, at 90 feet, and ventilation silencers (variable bypass valve [VBV] silencers), at 68 feet. Analysis of simulated views of the project from sensitive viewing positions (key observation points) shows that the project would not cause adverse visual impacts. Ratings of existing visual or scenic quality from key observation points range from low to moderate to moderately high. Viewer sensitivity at these points is rated as moderate to moderately high. The project is not located in a scenic or protected viewshed. Although the project will be seen by viewers leaving or entering newly developing residential areas, it will not significantly degrade the scenic quality of the existing viewshed. This viewshed is characterized by high voltage transmission lines and the Valley Substation in the foreground and middleground, and by low hills in the background. Section 8.13 contains a detailed discussion of the visual resources assessment.

1.5.5 Water Resources

The water to be used in the SVEP cooling tower and as process makeup for the power cycle systems will be high-purity, tertiary-treated, reclaimed water provided by the Eastern Municipal Water District from their water reclamation system, which includes several waste water treatment plants. No potable or other fresh water will be used for these purposes. The average net and peak consumption of reclaimed water by the SVEP will be approximately 851 and 1,003 acre-feet per year, respectively. Stormwater runoff from the project site during construction and operation will be carefully controlled in accordance with an engineered drainage system, oil-water separators, a stormwater retention pond, and standard Best Management Practices. The project would not have an adverse effect on the availability or quality of water resources. Section 8.15 contains a detailed analysis of water resources.

1.6 Key Benefits

1.6.1 Environmental

The SVEP will use the most efficient combustion turbine technology currently available, and SCR and CO catalyst to minimize emissions from the facility. NO_x emissions (a precursor to ozone formation) produced by the SVEP will be at least 90 percent less per megawatt than those produced by many older, existing power plants. In addition to the significant reduction of emissions, the SVEP's operating efficiency will be such that the plant will consume less fuel than older plants of similar size.

The use of reclaimed water as primary cooling and process water for the SVEP will prevent an additional continuous demand on the local potable water system and will allow effective use of the area's reclaimed water supply. The SVEP complies with policy guidance included in the Commission's 2003 Integrated Energy Policy Report which encourages the use of alternative water supplies. The SVEP will utilize reclaimed water from the Eastern Municipal Water District for all of its cooling needs and other industrial uses where feasible. In this way, the SVEP is conserving fresh water within the State of California.

1.6.2 Employment

The project will provide for a peak of approximately 408 construction jobs over a 12-month period and approximately 9 technical and skilled, family-wage positions throughout the life of the plant. In addition to the direct employment benefit, the SVEP plant will require and use the services of local or regional firms for major maintenance and overhauls, plant supplies, and other support services throughout the life of the facility.

1.6.3 Energy Efficiency

The SVEP will be an efficient, environmentally responsible source of economic and reliable electrical energy to serve the growing energy demands of Southern California.

1.7 Persons Who Prepared the AFC

Persons with primary responsibility for the preparation of each section of this AFC are listed in Appendix 1D.