

1. SUMMARY

Construction-related activities associated with the buildout of the proposed project are not expected to consume significant amounts of electricity or natural gas, or significantly impact the distribution network, because the construction activities are projected to occur over a three-year period and completed by 2015. Due to the temporary nature of the demand for electricity and nature gas, construction-related impacts would be less than significant.

Under the proposed project, with and without residential overlay option, the estimated electricity demand would be 21,206,495 and 18,914,038 kilowatt-hours per year, respectively. The estimated natural gas demand with and without the residential overlay option, would be 47,896 and 51,904 Million British Thermal Units (MMBTU) per year, respectively. The proposed project is consistent with planning and growth projections for both the Southern California Association of Government's (SCAG's) North Los Angeles County Subregion and the City of Santa Clarita. The energy supply that would be required by the proposed project is within the parameters of projected load growth in the City. Therefore, impacts would be less than significant.

2. EXISTING CONDITIONS

a. Electricity

California has the lowest electricity per capita usage in the nation.¹ In fact, while the national electricity per capita rate has steadily increased, California's electricity per capita rate has remained stable for more than 30 years because of the state's energy efficiency standards and conservation programs.²

Approximately 68 percent of California's electricity is produced in state, with the remaining electricity coming from out-of-state imports.³ The state's electricity generation system provides over 306,000 gigawatt hours per year.⁴ Current electricity forecasts are “markedly lower” than past forecasts due to the lower anticipated economic growth, both in the short and long term, and increasing energy efficiencies.⁵

The project site is located within the Southern California Edison (SCE) service area. The nearest electrical lines come from Soledad Canyon Road via existing power lines, which presently cross the Santa Clara

¹ *Summary of the 2007 Integrated Energy Policy Report, California Energy Commission, p. 3.*

² *2009 Integrated Energy Policy Report, California Energy Commission, p. 4.*

³ *2009 Integrated Energy Policy Report, p. 2.*

⁴ *2009 Integrated Energy Policy Report, p. 48.*

⁵ *2009 Integrated Energy Policy Report, p. 3.*

River and the project site. Additionally, service lines exist within Lost Canyon Road to the southwest of the project site, and Lost Canyon Road at La Veda Avenue to the east of the site.

b. Natural Gas

Approximately 13.5 percent of California's natural gas is produced in state; the remaining portion of the natural gas supply comes from the Southwest (40 percent), the Rocky Mountains (23 percent), and Canada (23.5 percent).⁶ According to the 2008 California Gas Report, natural gas demand in California is “expected to grow at a modest rate of just 0.07 percent per year from 2008 to 2030.”⁷ Residential demand, in particular, is expected to increase at an annual average rate of 0.04 percent.⁸ Commercial demand is expected to grow at an annual rate of 0.22, whereas industrial demand is estimated to decline by 0.53 percent on an annual basis.⁹ As provided in the 2010 California Gas Report, the state is projected to have adequate natural gas resources to meet the statewide demand during the 2008 to 2030 time frame.¹⁰

With regards to the Southern California Gas Company (SCGC) service area, gas demand for all market sectors is expected to grow at an annual average rate of just 0.21 percent from 2010 to 2030.¹¹ In comparison, the 2008 California Gas Report projected an annual growth rate of 0.01 percent from 2008 to 2030.¹² According to the 2010 California Gas Report, the “ The difference between the two forecasts is caused by the slump in the housing market for the next few years, a reduced employment forecast, a higher gas price projection, and aggressive energy efficiency savings goals.”¹³

The project is within the SCGC service area. Existing service lines are located in Soledad Canyon Road to the north, Lost Canyon Road to the southwest, and Lost Canyon Road near La Veda Avenue to the east.

c. Communications

Phone service to the project site would be from AT&T. Service is available from Soledad Canyon Road via an existing line, which crosses the Santa Clara River and the project site. Existing service lines are also located within Lost Canyon Road in the southwest corner of the site and Lost Canyon Road near La Veda Avenue.

⁶ 2009 Integrated Energy Policy Report, p. 11.

⁷ 2010 California Gas Report, California Gas and Electric Utilities, p. 7.

⁸ 2010 California Gas Report, California Gas and Electric Utilities, p. 7.

⁹ 2010 California Gas Report, California Gas and Electric Utilities, p. 7.

¹⁰ 2008 California Gas Report, California Gas and Electric Utilities, pp. 14, 15, and 18.

¹¹ 2010 California Gas Report, California Gas and Electric Utilities, p. 66.

¹² 2008 California Gas Report, California Gas and Electric Utilities, p. 7.

¹³ 2010 California Gas Report, California Gas and Electric Utilities, p. 7.

The project site also is within the Time Warner cable service area. Existing service lines are located in Soledad Canyon Road to the north, Jakes Way to the west and Lost Canyon Road to the east. Existing service lines are also located within Lost Canyon Road in the southwest corner of the site and Lost Canyon Road near La Veda Avenue.

d. Energy Conservation

The California Energy Commission (CEC) was created as the state's principal energy planning organization in 1974, in order to meet the energy challenges facing the state in response to the 1973 oil embargo. The CEC is charged with six basic responsibilities when designing state energy policy: (1) forecasting statewide electricity needs; (2) licensing power plants to meet those needs; (3) promoting energy conservation and efficiency measures; (4) developing renewable energy resources and alternative energy technologies; (5) promoting research, development and demonstration; and (6) planning for and directing state response to energy emergencies.¹⁴

Title 24, Part 6, of the California Code of Regulations contains the CEC's Energy Efficiency Standards for Residential and Nonresidential Buildings. Title 24 was first established in 1978, in response to a legislative mandate to reduce California's energy consumption. Since that time, Title 24 has been updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

On April 23, 2008, the CEC adopted the 2008 standards, which must be followed by projects that submit an application for a building permit on or after January 1, 2010. The CEC adopted the 2008 standards for a number of reasons: (1) to provide California with an adequate, reasonably priced, and environmentally sound supply of energy; (2) to respond to Assembly Bill 32 (AB 32; the Global Warming Solutions Act of 2006), which requires California to reduce its carbon footprint to 1990 levels by 2020; (3) to pursue the statewide policy that energy efficiency is the resource of choice for meeting California's energy needs; (4) to act on the findings of California's Integrated Energy Policy Report, which indicate that the 2008 Standards are the most cost-effective means to achieve energy efficiency, reduce the energy demand associated with water supply, and reduce greenhouse gas emissions; (5) to meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures in the update of all state building codes; and (6) to meet the Executive Order in the Green Building Initiative to improve the energy efficiency of nonresidential buildings through aggressive standards.¹⁵

¹⁴ *Summary of the 2007 Integrated Energy Policy Report*, California Energy Commission, p. 2.

¹⁵ See <http://www.energy.ca.gov/title24/2008standards/index.html>, last visited on August 17, 2010.

As indicated above, in addition to Title 24, AB 32 is anticipated to result in the future regulation of energy resources in California. (See **Section 4.22, Global Climate Change**, for additional information on AB 32.) In order to achieve these emission reductions, it is generally accepted that California will need to improve its overall energy efficiency, which includes the use of more renewable energy resources. Pursuant to AB 32, the California Air Resources Board (CARB) will work with other state agencies (including the CEC), to implement feasible programs and regulations that reduce emissions and improve energy efficiency.¹⁶

Additional operative energy conservation programs and policies within California are highlighted briefly below:¹⁷

- **Senate Bill 107:** This legislation, which addresses California's Renewables Portfolio Standard (RPS), requires retail sellers of electricity to procure 20 percent of retail sales from renewable energy by 2010.
- **Assembly Bill 1613:** This legislation, also known as the Waste Heat and Carbon Emissions Reduction Act, was designed to encourage the development of new combined heat and power systems in California with a generating capacity of up to 20 MW.
- **Senate Bill 1:** This legislation enacted the Governor's Million Solar Roofs program and has an overall objective of installing 3,000 MW of solar photovoltaic systems.
- **Executive Order S-14-08:** This order, issued by Governor Schwarzenegger, established accelerated RPS targets—specifically 33 percent by 2020.
- **Executive Order S-21-09:** This order, also issued by Governor Schwarzenegger, requires CARB to adopt regulations, by July 31, 2010, increasing California's RPS to 33 percent by 2020.

3. PROPOSED PROJECT IMPROVEMENTS

a. Electricity

Primary service would come from Soledad Canyon Road via existing power lines, which presently cross the Santa Clara River and the project site. This existing line would be extended to serve the project's initial development phases. Upon its construction, power lines would be placed within the Vista Canyon Road Bridge. Additionally, service lines exist within Lost Canyon Road to the southwest and Lost Canyon Road at La Veda Avenue to the east, both of which would likely be extended into the project site. The project applicant has committed to requiring that all future residential and non-residential buildings

¹⁶ See <http://www.arb.ca.gov/cc/ghgsectors/ghgsectors.htm#electric>, last visited on August 17, 2010 [highlights targeted improvements for the energy sector].

¹⁷ See also *2009 Integrated Energy Policy Report, supra*, pp. 20-40 [containing additional information regarding California's energy-related policies and activities].

exceed the 2008 Title 24 standards, which are effective January 1, 2010, by a minimum of 20 percent. All utility lines on the project site would be placed underground.

b. Natural Gas

Existing service lines are located in Soledad Canyon Road to the north, Lost Canyon Road to the southwest, and Lost Canyon Road near La Veda Avenue to the east. Gas service to the project would be extended to the site from one of these existing sources. A gas line would also be placed into the Vista Canyon Road Bridge. The project applicant has committed to requiring that all future residential and non-residential buildings exceed the 2008 Title 24 standards, which are effective January 1, 2010, by a minimum of 20 percent.

c. Communications

Telephone line service would come from Soledad Canyon Road via an existing line, which crosses the Santa Clara River and the project site and would be placed in the Vista Canyon Road Bridge upon its construction. Telephone lines would be constructed underground throughout the project site in phases and as development commences. Existing service lines are also located within Lost Canyon Road in the southwest corner of the site and Lost Canyon Road near La Veda Avenue. These localized lines may also be extended to the site and utilized for the early phases of the project.

Existing cable service lines are located in Soledad Canyon Road to the north, Jakes Way to the west and Lost Canyon Road to the east. A main line feeder from Soledad Canyon Road would be placed in the Vista Canyon Road Bridge. Existing service lines are also located within Lost Canyon Road in the southwest corner of the site and Lost Canyon Road near La Veda Avenue. These localized lines may be utilized for the early phases of the project.

4. PROJECT IMPACTS

a. Significance Threshold Criteria

(1) Electricity

Appendix G of the *State CEQA Guidelines* does not include thresholds for determining the significance of impacts related to electricity. However, Appendix F of the *State CEQA Guidelines* is instructive and has informed the analysis provided in this section. More specifically, for purposes of this analysis, impacts related to electricity are considered significant if the project would:

- Consume fuel or energy that could not be accommodated within the long-term electricity source and distribution planning of SCE;

- Fail to comply with the energy building regulations adopted by the CEC (i.e., Title 24 of the California Code of Regulations); or
- Require utilities or services that are not available to serve the proposed project, or the considerable extension of infrastructure to the project site.

(2) Natural Gas

Appendix G of the *State CEQA Guidelines* does not include thresholds for determining the significance of impacts related to natural gas. However, Appendix F of the *State CEQA Guidelines* is instructive and has informed the analysis provided in this section. More specifically, for purposes of this analysis, impacts related to natural gas are considered significant if the project would:

- Consume fuel or energy that could not be accommodated within the long-term natural gas source and distribution planning of SCGC;
- Fail to comply with the energy building regulations adopted by the CEC (i.e., Title 24 of the California Code of Regulations); or
- Require utilities or services that are not available to serve the proposed project, or the considerable extension of infrastructure to the project site.

b. Impact Analysis

(1) Construction-Related Impacts

During construction of the proposed project, energy would be required to serve construction trailers, power tools, tool sheds, work and storage areas, and other facilities associated with development activities. However, construction is not expected to consume significant amounts of electricity or significantly impact the distribution network because the construction activities are projected to occur over a three-year period and completed by the year 2015.

It also is expected that little natural gas would be consumed during project construction phases, with the possible exception of gas released during the installation and upgrade of natural gas facilities. The amount consumed by such activities would be minimal and is not considered to significantly impact natural gas supplies or infrastructure.

In summary, energy demands associated with construction activities required to buildout the proposed project are expected to result in a less than significant impact to electricity and natural gas resources.

(2) Operational-Related Impacts

Table 4.23-1, Total Electricity Usage, below, presents the projected electricity demand for the proposed project. As demonstrated in **Table 4.23-1**, the proposed project's electricity demands would be 21,206,495 kilowatt-hours per year. With the residential overlay, the proposed project's electricity demand would be 18,914,038 kilowatt-hours per year. As noted above, the project applicant has committed to requiring that all future residential and non-residential buildings exceed the 2008 Title 24 standards, by a minimum of 20 percent; the electricity demand that would occur without this efficiency improvement also is illustrated in **Table 4.23-1**. As shown, the proposed project's design features result in an 11 percent reduction in electricity demand.

**Table 4.23-1
Total Electricity Usage**

Source	Units	Annual Electricity Usage		
		Without Project Design Features	Vista Canyon	Improvement
Proposed Project				
Residential		4,454,223	4,008,399	10%
Non-Residential		17,626,270	15,650,955	11%
Municipal	kWh/yr	1,787,193	1,538,069	14%
Pools		9,072	9,072	0%
Total		23,876,757	21,206,495	11%
Proposed Project with Residential Overlay Option				
Residential		5,277,997	4,769,377	10%
Non-Residential		13,951,063	12,431,768	11%
Municipal	kWh/yr	1,932,194	1,703,820	12%
Pools		9,072	9,072	0%
Total		21,170,325	18,914,038	11%

Source: Environ, 2010

kWh = kilowatt-hour; Title 24 = California Code of Regulations (CCR), Title 24, also known as the California Building Standards Code; WPDF = Without Project Design Features scenario; yr = year

The Without Project Design Features scenario's (WPDF) annual electricity usage reflects the electricity usage from residential and non-residential buildings that are minimally compliant with 2008 Title 24 standards. The calculation of Vista Canyon's annual electricity usage incorporates the commitment to be 20% better than 2008 Title 24 standards for residential and non-residential buildings. Although the applicant is committed to using renewable electricity equivalent to an 80,000 square foot photovoltaic system, this electricity savings was not accounted for here.

2 Energy requirements for water pumping depend on the water source. Vista Canyon's municipal electricity usage assumes that 30% of recycled water treated on-site will be used to supply the non-potable demand of Vista Canyon. The WPDF scenario's municipal electricity usage assumes that the recycled water demand is 1.1% of the total water demand.

The proposed project is consistent with planning and growth projections for both SCAG's North Los Angeles County Subregion and the City of Santa Clarita, as discussed in **Section 4.17, Population, Housing, and Employment**. The electrical loads that will be required by the proposed project are within the parameters of projected load growth in the City, and SCE is planning to meet the demand in this area. Therefore, impacts would be less than significant.

Table 4.23-2, Total Natural Gas Usage, below, presents the projected natural gas demand for the proposed project. As demonstrated in **Table 4.23-2**, the proposed project's natural gas demands would be 47,896 MMBTU per year. With the residential overlay option, the proposed project's natural gas demand would be 51,904 MMBTU per year. As noted above, the project applicant is committed to requiring that all future residential and non-residential buildings exceed the 2008 Title 24 standards by a minimum of 20 percent; the natural gas demand that would occur without this efficiency improvement also is illustrated in **Table 4.23-2**. As shown, the proposed project's design features result in a 16 percent reduction in natural gas demand.

**Table 4.23-2
Total Natural Gas Usage**

Source	Units	Annual Natural Gas Usage		
		Without Project Design Features	Vista Canyon	Improvement
Proposed Project				
Residential		37,652	31,613	16%
Non-Residential	MMBTU/yr	19,432	16,283	16%
Pools		0	0	--
Total		57,084	47,896	16%
Proposed Project with Residential Overlay Option				
Residential		45,202	37,965	16%
Non-Residential	MMBTU/yr	16,533	13,940	16%
Pools		0	0	--
Total		61,735	51,904	16%

Source: Environ, 2010

MMBTU = Million British Thermal Units; Title 24 = California Code of Regulations (CCR), Title 24, also known as the California Building Standards Code; WPDF = Without Project Design Features scenario; yr = year

1 The WPDF's annual natural gas usage reflects the natural gas usage from residential and non-residential buildings that are minimally compliant with 2008 Title 24 standards. The calculation of Vista Canyon's annual natural gas usage incorporates the applicant's commitment to be 20% better than 2008 Title 24 for residential and non-residential buildings.

2 The calculation of Vista Canyon's annual natural gas usage incorporates Vista Canyon Ranch, LLC's commitment to using solar heating rather than natural gas heating for all private pools. Private pools are also assumed to use solar heating in the WPDF case.

The proposed project is consistent with planning and growth projections for both SCAG's North Los Angeles County Subregion and the City of Santa Clarita, as discussed in **Section 4.17, Population, Housing, and Employment**. The natural gas supply that would be required by the proposed project are within the parameters of projected load growth in the City, and SCGC is planning to meet the demand in this area. Therefore, impacts would be less than significant.

(3) Infrastructure Extension

(a) Electric Lines.

All utilities constructed for the proposed project would be consistent with SCE Rule 15, which states that the developer is responsible for trenching, backfilling, necessary conduits, and substructures for the installation of distribution lines as their contribution for extending service to a project site. In addition, SCE would review the proposed tract map to ensure access consistency with its standards. Therefore, the proposed project would not require considerable extension of service facilities to the project site, and impacts would be less than significant.

(b) Natural Gas Lines.

Design and sizing of all natural gas infrastructure would support the proposed project and meet all relevant engineering requirements to the satisfaction of SCGC and the City of Santa Clarita. Because serving new areas and upgrading the size of existing gas mains is routine for SCGC, and because SCGC's long-term infrastructure planning takes local and regional general plans into account so that new developments are planned for, extending natural gas infrastructure to the project site would not result in a significant impact.

(c) Communication Infrastructure

Primary telephone service would come from Soledad Canyon Road via an existing line, which crosses the Santa Clara River and the project site, and would be placed in the Vista Canyon Road Bridge upon its construction. Telephone lines would be constructed underground throughout the project site in phases and as development commences. Design and sizing of all telephone infrastructure would support the proposed project and meet all relevant engineering requirements to the satisfaction of AT&T and the City of Santa Clarita. Because serving new areas and upgrading the existing communications lines is routine for AT&T, and would occur within existing right-of-ways, extending telephone infrastructure to the project site would not result in a significant impact.

Existing cable service lines are located in Soledad Canyon Road to the north, Jakes Way to the west and Lost Canyon Road to the east. A main line feeder from Soledad Canyon Road would be placed in the Vista Canyon Road Bridge. Design and sizing of all cable infrastructure would support the proposed project and meet all relevant engineering requirements to the satisfaction of Time Warner and the City of Santa Clarita. Because serving new areas and upgrading the existing communications lines is routine for Time Warner, and would occur within existing right-of-ways, extending telephone infrastructure to the project site would not result in a significant impact.

5. MITIGATION MEASURES ALREADY INCORPORATED INTO THE PROJECT

As discussed in **Section 4.22, Global Climate Change**, the project's proposed residential and commercial structures would be designed and constructed to standards that are 20 percent more efficient than required by the 2008 Title 24 standards. Additionally, the project applicant would provide ENERGY STAR appliances, solar heating for pools, and on-site renewable energy resources. These design features would reduce the project's demand for electricity and natural gas.

6. MITIGATION MEASURES PROPOSED BY THIS EIR

No mitigation is recommended or required.

7. CUMULATIVE IMPACTS

a. Santa Clarita Valley Cumulative Buildout

This cumulative "Santa Clarita Valley Cumulative Build-Out Scenario" entails buildout of all lands under the current land use designations indicated in the existing Santa Clarita Valley Area Plan and the existing General Plan, plus the proposed project, plus all known active pending existing General Plan Amendment requests for additional urban development in the unincorporated area of Santa Clarita Valley and the City of Santa Clarita.

As previously noted, the proposed project is consistent with planning and growth projections for both SCAG's North Los Angeles County Subregion and the City of Santa Clarita, as discussed in **Section 4.17, Population, Housing, and Employment**. The electrical loads that would be required by the proposed project are within the parameters of projected load growth in the City, and SCE is planning to meet the demand in this area. The natural gas supply that would be required by the proposed project also is within the parameters of projected load growth in the City, and SCGC is planning to meet the demand in this area. Therefore, impacts would be less than significant.

b. Proposed OVOV General Plan

The One Valley One Vision (OVOV) General Plan Buildout Scenario entails buildout of all lands under the current land use designations indicated in the proposed OVOV General Plan, including the proposed project. The proposed project's contribution to the OVOV General Plan Buildout under both development scenarios (i.e., with or without the residential overlay) would account for approximately 0.001 percent of the estimated single-family units, 0.03 percent of the estimated multi-family units, 0.01 percent of the estimated commercial center square footage, 0.08 percent of the estimated hotel rooms, 0.01 percent of the estimated elementary and middle school students, 0.01 percent of the estimated high school students, 0.08 percent of the estimated commercial office square footage (0.05 percent with the residential overlay option), and 0.01 percent of the estimated parkland acreage. Therefore, the proposed project would be consistent with the estimated buildout under the proposed OVOV General Plan. The electrical loads and natural gas supply that would be required by the proposed project are within the parameters of projected growth in the OVOV General Plan area. Therefore, impacts would be less than significant.

8. CUMULATIVE MITIGATION MEASURES

Cumulative development would be required to implement mitigation measures, if necessary, and as determined on a project-by-project basis. Therefore, no additional mitigation is recommended or required for this project.

9. SIGNIFICANT UNAVOIDABLE IMPACTS

With implementation of the design feature requiring all residential and non-residential buildings to be 20 percent more energy efficient than the 2008 Title 24 standards require, no significant and unavoidable impacts would result from implementation of the proposed project.