

4.12.5 PUBLIC UTILITIES - ELECTRICITY, NATURAL GAS, AND TELECOMMUNICATION SERVICES

4.12.5.1 INTRODUCTION

This section evaluates the potential impacts from development of the Amoruso Ranch Specific Plan (ARSP or Proposed Project) and associated increased demand for electricity, natural gas, and telecommunications on infrastructure and supply. The existing electricity, natural gas, and telecommunication services setting such as current supply, demand, and infrastructure is described. The electricity, natural gas, and telecommunications analysis is based on information within the following documents:

- *City of Roseville General Plan 2025*, as amended June 2015 (City of Roseville, 2015a)
- *Creekview Specific Plan Final EIR*, April 2011 (City of Roseville, 2011a)
- *Amoruso Ranch Technical Dry Utilities Report*, September 2015 (Capitol Utility Specialists, 2015; Included in **Appendix K**)

The documents listed above are available for review during normal business hours at:

City of Roseville Permit Center
311 Vernon Street
Roseville, CA 95678

In response to the Notice of Preparation (NOP; **Appendix C**), the City of Roseville (City) received comments from other members of the public requesting that the Draft Environmental Impact Report (EIR) address whether Toad Hill Ranches will have the opportunity to be served by Roseville Electric. At this time Roseville Electric has no plans to serve any facilities outside the City limits, consistent with the City's General Plan policies. Refer to **Appendix C** of this EIR to view the comments received in response to the NOP.

4.12.5.2 ENVIRONMENTAL SETTING

Electricity Supply

The City of Roseville Electric Department (Roseville Electric) provides electrical service to customers within the City limits and would be the service provider for the Proposed Project. The City purchases wholesale electrical power from the Western Area Power Administration (WAPA), which is generated by the federal government's Central Valley Project, which produces 100 percent hydroelectric energy and consists of a system of dams, reservoirs, and power plants within central and northern California. The term of the existing contract with WAPA extends through December 31, 2024. In 1968, the City became a charter member in the Northern California Power Agency (NCPA), a consortium of municipal electrical utilities. The City participates in several resources developed by NCPA, including its geothermal, steam-injected gas turbine, and hydroelectric projects. In addition, approximately 52 percent of the City's power during the 2013/2014 fiscal year was generated at the City owned Roseville Energy Park (REP).

4.12.5 Public Utilities – Electricity, Natural Gas, and Telecommunication Services

The REP is a 160-megawatt natural-gas-fired power plant that utilizes a state of the art combined cycle gas turbine technology. The REP went into service in October 2007 providing the cleanest fossil-fired energy possible from a facility of its size. The City operates the REP during periods where the alternative cost of supplying customer loads is higher, and idles the plant when alternative electric purchases are less expensive than REP operations. On September 1, 2010, the City assumed full title and ownership of the 48 mega-watt-capacity NCPA Combustion Turbine Project No. 1 (referred to as Roseville Power Plant 2) to meet reserve and capacity requirements. Roseville Power Plant 2 is connected to the Roseville electric distribution system, provides capacity and reserves for the City, and is used for peaking energy and limited high-value economic dispatch.

The City has historically entered into long-term purchases to hedge electricity costs, and enters into various fixed-price purchase or sale contracts on the open market at various times to meet its power supply requirements. The City also typically enters into seasonal and short-term purchases for varying terms from a number of power suppliers. The City expects that it will obtain additional resources from market purchases or investment in generation facilities, either independently, through NCPA or other agencies.

Table 4.12.5-1 shows the mix of power sources used by Roseville in 2013.

TABLE 4.12.5-1
SUMMARY OF ROSEVILLE ELECTRIC RESOURCE MIX FOR CALENDAR YEAR 2013

Energy Resources	2013 Power Mix (Actual)	2013 California Power Mix
Eligible Renewable	25%	15%
Biomass & Waste	0%	2%
Geothermal	21%	5%
Small Hydroelectric	1%	2%
Solar	0%	<1%
Wind	3%	5%
Coal	0%	8%
Large Hydroelectric	14%	13%
Natural Gas	48%	37%
Nuclear	0%	16%
Other	0%	0%
Unspecified Sources of Power	13%	12%
Total	100%	100%
Source: CEC, 2013a		

For fiscal year 2012/2013, the City's electrical consumption was approximately 1,194,183 mega-watt hours (MWh). The City's estimated electrical consumption for fiscal year 2013/2014 was 1,183,100 MWh. It is expected that the residential and commercial sectors will experience higher consumption growth than the industrial sector. By the year 2018, the City's annual electrical consumption is projected to rise to

1,635,476 MWh. A peak demand of 343 mega-watts was reached on July 24, 2006 (City of Roseville, 2015a).

Transmission

Existing Onsite Electric Facilities

Roseville Electric has no distribution facilities immediately adjacent to the site. Pacific Gas & Electric (PG&E) maintains an overhead 12 kilo-Volt (kV), 3-phase, electric mainline that runs east to west along the north side of Sunset Boulevard West adjacent to the ARSP Area (project site). Two PG&E overhead lines extend south onto or adjacent to the property. The first is a 12 kV radial three phase tap that runs south along the project site's western property line and serves a pump on the adjacent property. The second is a 12 kV radial three phase tap that runs south and serves the two old farm houses and a pump. Since electric service will be supplied by Roseville Electric, neither PG&E line has any practical long term value to the development. Both will be removed or undergrounded as the project develops.

Substations

The closest existing substation is a 92 megavolt amperes (MVA) facility located on Blue Oaks Boulevard in the Westplan. It provides distribution voltages at 12 kV, and is equipped with fourteen mainline 12 kV breakers/ feeder circuits. All excess capacity from this substation has been committed to other projects. The Proposed Project would be served from the future substation within the Creekview Specific Plan (CSP) Area. As shown in **Figure 2-16**, the Creekview Substation is planned for a 0.98 acre site (Parcel C-81) on the northwest corner of Westbrook Boulevard and Benchmark Drive in the CSP Area, adjacent to open space. Substations typically take 26 to 30 months to plan, design, fabricate, and construct. The Creekview Substation will be served from the 60 kV overhead transmission line described below. A block wall will be constructed by Roseville Electric around the substation site.

60 kV Transmission

A 60 kV overhead transmission line (double circuit) is planned to be extended west on Blue Oaks Blvd, northwest along the south side of Pleasant Grove Creek, then north up to the east side of Westbrook Boulevard to the future Creekview Substation. Long range plans anticipate the line continuing north then east through the Placer Ranch Area, where it will tie into existing Roseville Electric 60 kV facilities and complete a loop. Roseville Electric has specific requirements for public utility easements (PUEs) along all roadways that may require a 60 kV line.

Natural Gas Service

PG&E would be the natural gas service provider for the Proposed Project. PG&E has no existing natural gas facilities on or adjacent to the site. It maintains an 8-inch distribution gas main with a maximum operating pressure (MOP) of 60 pounds per square inch gauge (psig) on Blue Oaks Boulevard and Hayden Parkway, approximately 0.8 miles east of the future Westbrook Boulevard. The system is fed from two natural gas regulator stations: one located at Blue Oaks Boulevard and Industrial Avenue, the other at Country Club Drive and Badovinac Drive. The 8-inch gas main will extend west from Hayden Parkway along Blue Oaks Boulevard to Westbrook Boulevard in the PUE in a joint trench consisting of

Roseville Electric, Comcast, and AT&T. The 8-inch gas main will continue north up Westbrook Boulevard through the CSP Area towards the southern boundary of the Proposed Project.

Telecommunication Services

The project site is within the service areas of AT&T, Comcast, and Zeta Broadband. Together, these providers offer both voice and data communication services. Both AT&T and Comcast offer a “triple play” of services (dial tone, video, and internet access). Funding for telecommunication services is collected through company billings and developer fees applied to the extension of infrastructure to new development.

AT&T

Two AT&T Wire Centers serve the project site, with an exchange boundary running east-west through the very southernmost portion of the project site, Pleasant Grove Exchange and Stanford Exchange. The Pleasant Grove Exchange is a much smaller and more rural exchange. While the majority of the Proposed Project is located in the northern Pleasant Grove exchange service area, the exchange boundary will be relocated so that the Proposed Project is located in and served from the Stanford Exchange, which also serves the CSP Area. Conduit structure exists at Blue Oaks Boulevard and Hayden Parkway. With the development of the CSP, AT&T would push fiber west from Blue Oaks and Hayden then north up Westbrook Boulevard towards the southern boundary of the Proposed Project in a joint trench.

Comcast

Comcast has no existing facilities in the immediate vicinity of the project site. A conduit structure exists on Blue Oaks Boulevard and Hayden Parkway. With the development of the CSP, Comcast would push fiber in the proposed joint trench that will extend west on Blue Oaks from the existing conduit structure at Blue Oaks and Hayden Parkway, then north up Westbrook Boulevard towards the southern boundary of the Proposed Project.

Zeta Broadband

Wireless internet service is available via a line-of-sight connection (through a dish antenna) from Zeta Broadband facilities on the Consolidated Communications Tower in Roseville, about 4.2 miles east of the project site.

4.12.5.3 REGULATORY SETTING

Federal

The Federal Energy Regulatory Commission regulates the transmission and sale of electricity in interstate commerce, licenses hydroelectric projects, and oversees related environmental matters. In 2006, the United States Environmental Protection Agency (EPA) and United States Department of Energy (USDOE) co-sponsored the National Action Plan for Energy Efficiency (the Action Plan). The Action Plan presents policy recommendations for creating a sustainable, aggressive national commitment to energy efficiency through gas and electric utilities and partner organizations. Such a commitment could save many billions

4.12.5 Public Utilities – Electricity, Natural Gas, and Telecommunication Services

of dollars on energy bills over the next 10 to 15 years, contribute to energy security and improvement the environment. Roseville Electric has adopted the principles of the Action Plan. In 2008, the Vision for the National Action Plan for Energy Efficiency was published which establishes a goal of achieving all cost-effective energy efficiency by 2025; presents ten implementation goals for states, utilities, and other stakeholders to consider to achieve this goal; describes what 2025 might look like if the goal is achieved; and provides a means for measuring progress. It is a framework for implementing the five policy recommendations of the Action Plan, which can be modified and improved over time.

State

Senate Bill (SB) X1 2

Senate Bill (SB) X1 2, enacting the California Renewable Energy Resources Act, expands the Renewable Portfolio Standard by establishing a goal of 20 percent of the total electricity sold to retail customers in California per year from renewable sources by December 31, 2013, and 33 percent by December 31, 2020 and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 mega-watts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers covered by SB 107, SB X1 2 adds local publicly owned electric utilities to the Renewable Portfolio Standard. The California Public Utilities Commission (CPUC) has established the quantity of electricity products from eligible renewable energy resources to be procured by retail sellers in order to achieve targets of 20 percent by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. The Act also requires that the governing boards for local publicly owned electric utilities establish the same targets, and the governing boards are responsible for ensuring compliance with these targets. The CPUC is responsible for enforcement of the Renewable Portfolio Standard for retail sellers, while the California Energy Commission and California Air Resources Board (CARB) will enforce the requirements for local publicly owned electric utilities.

For over 30 years, the City of Roseville has used renewable energy resources to meet a portion of its customers' needs with its ownership participation in the NCPA projects: Collierville hydroelectric facility; geothermal facilities; its purchased power from the federal entity WAPA – Sierra Nevada Region Central Valley Project hydro-electric system; and multiple contracts with other counterparties to deliver renewable resources from its portfolio of wind, biomass and small hydroelectric facilities. The City will continue to procure resources to comply with the Renewable Portfolio Standard. (City of Roseville, 2015a)

Green Building Standards

All new construction must adhere to the 2013 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11). The California Green Building Standards, referred to as CALGreen:

- Sets a threshold of a 20 percent reduction in indoor water use and includes voluntary goals for reductions of 30 percent, 35 percent and 40 percent.
- Requires separate meters for indoor and outdoor water use at nonresidential buildings; and at those sites, irrigation systems for larger landscaped areas must be moisture-sensing.

4.12.5 Public Utilities – Electricity, Natural Gas, and Telecommunication Services

- Calls for 50 percent of construction waste to be diverted from the landfills and lists higher, voluntary diversion amounts of 65 percent to 75 percent for new homes, and 80 percent for commercial construction.
- Mandates inspections of energy systems -- such as the heat furnace, air condition, and mechanical equipment -- for nonresidential buildings that are larger than 10,000 square feet to "ensure that all are working at their maximum capacity according to design efficiencies."
- Requires that paint, carpet, vinyl flooring, particle board and other interior finish materials be low-emitting in terms of pollutants.

PG&E Gas Rule

PG&E's Gas Rules 15 and 16 provide policies and procedures for the extension of gas services and distribution mains necessary to furnish permanent services to customers. It outlines responsibilities for installation and extension of gas lines, as well as financial contributions by project applicants.

Digital Infrastructure and Competitiveness Act (DIVCA)

The Digital Infrastructure and Competitiveness Act (DIVCA) was passed in 2006. Video providers obtain state franchises rather than local franchises for video services.

Local

The City of Roseville's 2025 General Plan includes goals and policies for electricity, natural gas, and telecommunications as detailed below:

Public Facilities Element – Electric Utility Goals

- Goal 1:** Maintain a municipal electric utility that provides an efficient, economical, and reliable electric system.
- Goal 2:** Provide electric services to all existing and future Roseville development through the City's electric Utility. The provision of services by another provider may be considered where it is determined that such service is beneficial to the City and its utility customers or the provision of City services is not feasible.
- Goal 3:** Maintain adequate resource reserves consistent with industry standards, sound utility planning, and applicable contracts.
- Goal 4:** Aggressively pursue cost-effective and environmentally safe alternative sources of energy and energy conservation measures.

Public Facilities Element – Electric Utility Policies

- Policy 1:** Secure new electric resources and transmission as necessary to meet projected demand levels.

4.12.5 Public Utilities – Electricity, Natural Gas, and Telecommunication Services

- Policy 2:** Provide improvements to the sub-transmission and distribution system, consistent with facility planning studies, to ensure a reliable source of electricity is maintained.
- Policy 3:** Develop siting and land use compatibility standards for energy facilities.
- Policy 4:** Extend existing resource contracts if found to be in the best interest of the City.
- Policy 5:** Explore the feasibility of the development of and participation in renewable energy resources.
- Policy 6:** Adopt a load/resources management plan, incorporating energy efficiency, conservation, load management, and reliability strategies, identifying program objectives and implementation and monitoring mechanisms.
- Policy 7:** Pursue effective measures to enhance reliability of interconnection of electric utility system to region-wide grid.
- Policy 8:** Pursue reasonable and cost-effective energy efficiency, conservation, and load management programs pertinent to the electric utility system.
- Policy 10:** Require new development to pay a fair share of the cost of new sub-transmission and distribution and distribution needed to serve the development and to dedicate sites and easements needed for substations, transmission, sub-transmission, and distribution.
- Policy 11:** Develop and implement public education programs designed to increase the public's awareness of energy issues, including conservation measures and practices.

Public Facilities Element – Privately-Owned Utilities Policies

- Policy 1:** Provide for the review and comment of development proposals by non-City-owned utilities.
- Policy 2:** Require the installation of communication and electric lines underground except when infeasible or impractical.
- Policy 3:** Require the provision of necessary utility easements in all new developments.
- Policy 4:** Work with non-City-owned utility providers to ensure that uses and equipment are planned and constructed in a manner consistent with adopted land use policies and design guideline, to the extent feasible.

The City also has several programs that address energy conservation. Refer to **Section 4.5, Climate Change and Greenhouse Gas Emissions**, for a full description of the City's energy conservations plans, policies and programs.

4.12.5.4 IMPACTS

Method of Analysis

This electricity, natural gas, and telecommunication analysis considers suppliers’ (Roseville Electric, PG&E, AT&T, and Comcast) ability to provide utility services to the Proposed Project. Demand is estimated at buildout for each service area to determine if the Proposed Project would have an adverse effect on electric, natural gas, or telecommunication providers. Capital Utility Specialists (2015) prepared a Technical Dry Utilities Study (included as **Appendix K**) to analyze and estimate demand from the Proposed Project on these services. Additionally, construction-related impacts (both off-site and on-site) are considered with relation to extending services to the project site.

Thresholds of Significance

For purposes of this EIR, a significant impact would occur if development of the Proposed Project would:

- Generate a demand for electricity, natural gas, or telecommunication services that requires extension of these facilities in a manner that could adversely affect the environment.

Impacts

IMPACT 4.12.5-1	INCREASED DEMAND FOR ELECTRICITY
Applicable Policies and Regulations	CCR Title 24 2013 California Green Building Standards Code
Significance with Policies and Regulations	Less than Significant
Mitigation Measures	None Required
Significance After Mitigation	Less than Significant

The development and implementation of the Proposed Project would increase the demand for electrical services. As shown in **Table 4.12.5-2**, the increased demand for electrical service is estimated to be approximately 19 MVA peak demand.

As described in **Section 4.12.5.2**, Roseville Electric currently has no distribution facilities immediately adjacent to the site; however, the Proposed Project would be served from the future Creekview Substation, which will be completed prior to occupancy of the Proposed Project. . As shown in **Figure 2-17**, four electric main line circuits will extend north from the planned Creekview Substation to the Proposed Project along Westbrook Blvd (two circuits on each side of the road). The circuits will branch and extend along all the major roads to and through pad mounted main line switches. Local 12 kV circuits extend off the main lines via pad mounted fused switches and distribute service to the commercial and residential neighborhoods. Transformers will be placed in series through residential and commercial neighborhoods to provide service to individual users. Residential circuits typically carry 120 to 160 homes each, with a maximum of 178 homes per circuit. An easement will be dedicated in accordance

4.12.5 Public Utilities – Electricity, Natural Gas, and Telecommunication Services

with Roseville Electric requirements along the east side of Westbrook Boulevard and south of Road A for a future 60 kV overhead line extension within the project site eventually tying into existing Roseville Electric 60 kV facilities and complete a loop.

Table 4.12.5-2
ESTIMATED ELECTRICAL PEAK DEMAND AT BUILDOUT

Land Use	Units Estimated	Square Feet Estimated	Peak Demand (MVA)
LDR ¹ and MDR ²	1,845	-	10.1
HDR ³	982	-	3.9
Commercial	-	442,000	3.1
Community Office	-	34,000	0.2
Elementary School	-	80,000	1.3
Total			18.7
1 – Low-density residential 2. – Medium-density residential 3 – High-density residential Source: Capitol Utility Specialists, 2015 (Appendix K).			

Potential environmental effects that could occur as result of constructing these electrical distribution facilities are addressed in this EIR, including **Section 4.4, Air Quality; Section 4.8, Vegetation and Wildlife; Section 4.9, Cultural and Paleontological Resources; and Section 5.0, CEQA Considerations.**

While development of the project site will result in increased demand for electricity, the impact is not considered significant. It is anticipated that there will be adequate electricity to serve the Proposed Project from the future Creekview Substation. The construction of the Creekview Substation and extension of infrastructure up to the southern boundary of the project site was analyzed within the *CSP Final EIR* (City of Roseville, 2011a); no other offsite improvements are anticipated to be required. Funding for 60kV line extension and substation improvements are collected through the Roseville Electric “backbone fee.” Potential impacts associated with the increased electricity demand as a result of the Proposed Project are considered **less than significant**. To the extent that increased electricity usage from the Proposed Project indirectly results in environmental effects due to fossil fuel consumption associated with power plant operation, such effects are addressed in **Section 4.5, Climate Change and Greenhouse Gas Emissions.**

4.12.5 Public Utilities – Electricity, Natural Gas, and Telecommunication Services

IMPACT 4.12.5-2	INCREASE DEMAND FOR NATURAL GAS
Applicable Policies and Regulations	PG&E Gas Rules 15 and 16
Significance with Policies and Regulations	Less than Significant
Mitigation Measures	None Required
Significance After Mitigation	Less than Significant

The development of the Proposed Project would increase the demand for natural gas. As shown in **Table 4.12.5-3**, the estimated peak demand at buildout is approximately 164 thousand cubic feet per hour (MCFH).

TABLE 4.12.5-3
ESTIMATED NATURAL GAS PEAK DEMAND AT BUILDOUT

Land Use	Units Estimated	Square Feet Estimated	Peak Demand (MCFH)
LDR and MDR	1,845		92.3
HDR	982		44.2
Community Commercial/Retail		442,000	22.1
Community Office		34,000	1.7
Elementary School		80,000	4.0
Total			164.2
Source: Capitol Utility Specialists, 2015 (Appendix K)			

As described in **Section 4.12.5.2**, PG&E has no existing natural gas facilities adjacent to the site; however, with the development of the CSP, an existing 8-inch gas main will be extended west from Hayden Parkway along Blue Oaks Boulevard to Westbrook Boulevard in the PUE in a joint trench consisting of Roseville Electric, Comcast, and AT&T. The 8-inch gas main will continue north up Westbrook Boulevard through the CSP Area to the southern boundary of the Proposed Project. The extension of natural gas lines up to the southern boundary of the project site was analyzed within the *CSP Final EIR* (City of Roseville, 2011a); no other offsite improvements are anticipated to be required.

Within the Proposed Project, the 8-inch plastic distribution main will continue north on Westbrook Boulevard through the site, with 4-inch and 6-inch ribs branching to serve the various neighborhoods. Distribution lines and services will extend off the main and will be sized based on anticipated gas loads to the various parcels. Residential neighborhoods will have 2-inch plastic mains and 1-inch services. Potential environmental effects that could occur as result of constructing this natural gas distribution system are addressed in this EIR, including **Section 4.4, Air Quality**; **Section 4.8, Vegetation and Wildlife**; **Section 4.9, Cultural and Paleontological Resources**; and **Section 5.0, CEQA Considerations**.

4.12.5 Public Utilities – Electricity, Natural Gas, and Telecommunication Services

PG&E will supply natural gas service to the project site upon request in accordance with the tariffs on file with the CPUC. The City’s development review process includes a review and comment opportunity for privately owned utility companies, including PG&E, to allow for informed input from each utility company on all development proposals. The input facilitates a detailed review of all projects by service purveyors to assess the potential demands for utility services on a project-by-project basis. The ability of PG&E to provide its services concurrently with each project is evaluated during the development process. Funding for gas service is collected through company billings and developer fees, which fund service extension and infrastructure. Potential impacts associated with the increased demand for natural gas as a result of the Proposed Project are considered **less than significant**. To the extent that increased natural gas usage contributes to climate change, such effects are addressed in **Section 4.5, Climate Change and Greenhouse Gas Emissions**.

IMPACT 4.12.5-3	INCREASED DEMAND ON CABLE TELEVISION AND TELEPHONE SERVICES
Applicable Policies and Regulations	General Plan Policies for Privately-Owned Utilities
Significance with Policies and Regulations	Less than Significant
Mitigation Measures	None Required
Significance After Mitigation	Less than Significant

As described in **Section 4.12.5.2**, two AT&T Wire Centers serve the project site, with an exchange boundary running east-west through the very southernmost portion of the project site. While the majority of the Proposed Project is located in the northern Pleasant Grove Exchange service area, the exchange boundary will be relocated so that the Proposed Project is located in and served from the Stanford Exchange. Cable television and telephone distribution lines to individual parcels would be extended from planned telecommunications infrastructure within the CSP Area, which will occur as development takes place. The extension of Stanford Exchange infrastructure up to the southern boundary of the project site was analyzed within the *CSP Final EIR* (City of Roseville, 2011a).

Within the Proposed Project, a backbone conduit and manhole system capable of supporting both copper and fiber systems will run along Westbrook Boulevard and the other major roads within the Proposed Project. Potential environmental effects that could occur as result of constructing the onsite AT&T infrastructure system are addressed in this EIR, including **Section 4.4, Air Quality**; **Section 4.8, Vegetation and Wildlife**; **Section 4.9, Cultural and Paleontological Resources**; and **Section 5.0, CEQA Considerations**.

The development of the Proposed Project will create an increased demand for cable television and telephone services. These additional services would be provided by private telecommunications companies, and would be funded through developer fees and future customer billing. In addition, the

4.12.5 Public Utilities – Electricity, Natural Gas, and Telecommunication Services

telecommunications companies would be given the opportunity to review and comment on any proposed development requiring new service. All phone and cable lines would be installed in roadway rights-of-way, so there would not be any environmental impacts beyond the construction impacts identified in this EIR. Therefore, the demand for cable television and telephone services is considered a **less-than-significant** impact.

IMPACT 4.12.5-4	CUMULATIVE IMPACTS REGARDING ELECTRICITY SERVICE
Applicable Policies and Regulations	CCR Title 24 2013 California Green Building Standards Code
Significance with Policies and Regulations	Less than Significant
Mitigation Measures	None Required
Significance After Mitigation	Less than Significant

Cumulative development in the region must comply with Title 24 of the California Code of Regulations to reduce overall energy demand. However, regional electricity demands are directly related to changing power generation and distribution in the Western U.S. Further, the sources of energy are diverse and widespread. The exact source that would supply future development in the City or the region is not known at this time. As shown in **Table 4.12.5-1** above, the region currently obtains power primarily from combustion (natural gas), hydroelectric facilities, and geothermal projects.

Buildout of new regional growth could require the construction of new or expanded facilities. WAPA has determined that the existing transmission lines in the greater Sacramento Area have reached their maximum power transfer limits for serving the area’s energy demands. In order to correct the problem, WAPA proposes to construct approximately 31 miles of new, double circuit, 230 kV transmission lines between its O’Banion Substation and the area just south of the Sacramento Municipal Utilities District (SMUD) Elverta Substation. In addition, SMUD’s existing 230/115kV transmission line between Elverta and Natomas Substations will be reconstructed. A number of alternative routes for the 230 kV line were studied and public hearings held. One of the alternative routes, Segment 2C2, would be located in a north-south direction along the western edge of the Sierra Vista Project. However, based on the environmental review process, Alternative B was selected as the environmentally preferred action alternative which is located along the State Route 99 corridor. Construction impacts associated with the new transmission lines could include soil erosion, storm runoff, increased noise, dust, and air quality. In addition, sensitive habitats, visual resources, and cultural resources could be affected.

The City’s strategy is to continue to rely on electricity from the WAPA and the REP, acquire new sources of energy, and continue to promote energy conservation and green technology. Refer to **Section 4.5, Climate Change and Greenhouse Gas Emissions**, for a list of measures the City of Roseville and Roseville Electric have employed to reduce energy demand and reduce greenhouse gas emissions.

4.12.5 Public Utilities – Electricity, Natural Gas, and Telecommunication Services

Further, energy conservation strategies have been incorporated into the Proposed Project and mitigation measures have been recommended in **Section 4.5**, which would reduce energy demands. The Proposed Project’s contribution to cumulative impacts associated with regional power supply projects is considered **less than significant** because the City is taking measures to acquire new source of energy and to promote energy conservation, regional power infrastructure projects would take place without the demands of the Proposed Project, and Roseville Electric has planned for the provision of adequate electricity for the project site, including provision of transmission facilities and a substation with the CSP.

IMPACT 4.12.5-5	CUMULATIVE IMPACTS REGARDING NATURAL GAS AND TELECOMMUNICATION SERVICES
Applicable Policies and Regulations	PG&E Gas Rules 15 and 16 General Plan Policies for Privately-Owned Utilities
Significance with Policies and Regulations	Less than Significant
Mitigation Measures	None Required
Significance After Mitigation	Less than Significant

Expansion of natural gas and telecommunication facilities would be required to serve the growing population of the region, and would be constructed as new development is approved. The construction and operation of additional natural gas and telecommunication transmission facilities to areas outside the City of Roseville where such facilities are not available could result in potentially significant environmental effects, in part, related to construction activities. Any infrastructure improvements would be subject to additional environmental review. The construction of additional natural gas transmission facilities, where such facilities do not exist, could result in indirect growth effects (loss of habitat, traffic, air, and noise). Because, as described above, natural gas and telecommunication facilities for the Proposed Project would be provided through planned improvements, and mitigation measures have been incorporated to reduce the environmental impacts of construction of the infrastructure improvements, the project’s contribution to this cumulative impact is not cumulatively considerable and would be **less than significant**.

4.12.5.5 MITIGATION MEASURES

None required.