

4.14.3 Energy Conservation

4.14.3.1 INTRODUCTION

The purpose of this section is to determine potential impacts to electrical and natural gas facilities within the Westside Community Planning Project Area.

4.14.3.2 ENVIRONMENTAL SETTING

a. Electricity

Southern California Edison (SCE) is the primary provider of electric service to the Westside Community Planning Area. The service area for SCE is 50,000 square miles and includes 180 cities and communities and 14 million people in central, coastal, and Southern California.¹

According to the CEC, SCE is projected to deliver approximately 100,907 gigawatt-hours (GWh) to its customers during 2011.² By 2022, SCE's demand is expected to increase to approximately 117,548 GWh, and SCE is prepared to meet this demand.³

Electrical infrastructure, including substations and transmission lines serving the electrical infrastructure is expanded in accordance with SCE's projected development demands.⁴

b. Natural Gas

Natural gas service to the City's Westside Community Planning Area is provided by the Southern California Gas Company (SCGC). SCGC operates numerous natural gas pipelines in the City's Westside Community Planning Area.

With regards to the SCGC service area, gas demand for all market sectors is expected to grow at an annual average rate of just 0.0212 percent from 2010 to 2030.⁵ In comparison, the 2008 California Gas

¹ Southern California Edison, "Company Overview," <http://www.sce.com/AboutSCE/CompanyOverview/default.htm>. 2011.

² California Energy Commission, California Energy Demand 2010-2020 Commission Adopted Forecast. Publication #CEC-200-2009-012-CMF. December 2009.

³ California Energy Commission, Preliminary California Energy Demand Forecast 2021-2022. Draft Staff Report. Publication #CEC-200-2011-011-SD. August 2011. Table 3-1.

⁴ CPUC, "Rules July 2007," http://docs.cpuc.ca.gov/published/RULES_PRAC_PROC/70731.htm#P323_46666. Rule 3.1. 2008.

⁵ California Gas and Electric Utilities, *2010 California Gas Report*, 66.

Report projected an annual growth rate of 0.15 percent from 2006 to 2025. According to the 2010 California Gas Report, the "difference between the two forecasts is caused by the slump in the housing market for the next few years, a reduced employment forecast, and aggressive energy efficiency savings goals."

SCGC is the sole supplier of natural gas to the Westside Community Planning Area, and will continue to expand its distribution facilities and gas lines as development occurs in the area. According to the CEC, SCGC provided approximately 295 billion cubic feet (bcf) of natural gas to its customers in 2009.⁶ By 2030, annual natural gas deliveries to SCGC customers are expected to increase to approximately 283 bcf per year and SCGC is prepared to meet this demand.⁷

c. Regulatory Framework

State

California Building Energy Efficiency Standards

Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards, were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. After adoption of the California Energy Security and Reliability Act of 2000 (AB 970), the CEC produced changes to the Building Energy Efficiency Standards. In November 2003, the CEC adopted these updated standards. The California Building Standards Commission adopted the 2008 changes in December 2008 and the updated standards took effect on January 1, 2010.

California Public Utilities Commission

The Public Utilities Commission (PUC) regulates privately owned telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation companies, in addition to authorizing video franchises. Five commissioners are appointed by the Governor and confirmed by the State Senate. Among the PUC's stated goals for energy regulation are to establish service standards and safety rules, authorize utility rate changes, oversee markets to inhibit anti-competitive activity, prosecute unlawful utility marketing and billing activities, govern business relationships between utilities and their affiliates, resolve complaints by customers against utilities, implement energy-efficiency and conservation

⁶ California Gas and Electric Utilities, *2010 California Gas Report*, 67.

⁷ California Gas and Electric Utilities, *2010 California Gas Report*, 67.

programs and programs for the low-income and disabled, oversee the merger and restructure of utility corporations, and enforce CEQA for utility construction.

City

Municipal Code

Section 12.115.010 of the City of Ventura Municipal Code adopts by reference the California Code of Regulations, Title 24, Parts 2 and 2.5 as published by the California Building Standards Commission as further described and includes the following:

- 2010 California Building Code (California Code of Regulations Title 24, Part 2) based on the 2008 International Building Code as prepared by the International Code Council, and as amended by the State of California;
- 2010 California Residential Building Code (California Code of Regulations Title 24, Part 2.5);

Such code shall include those sections requiring enforcement by the local building department, and as further amended by the City with provisions intended to address local climatic, geologic, and topographic conditions, as permitted by state law.

The City of Ventura Building Code became effective for new building permit applications received by the City on or after December 2010.

Energy Conservation/Renewable Energy Programs

The City has implemented additional programs to conserve energy and enhance the use of renewable energy sources.⁸ These include:

- Use solar panels at the City Maintenance Yard to produce 45 percent of its electricity needs (about 180,000 kilowatt-hours per year – the amount used by 30 homes).
- Reduce City electricity use by 2.8 million kilowatt hours each year through energy efficiency measures at City facilities.
- Produce over 2 million kilowatt-hours of electricity annually by renewable waste gas co-generation, which meets 20 percent of the Water Reclamation Facility's energy use.
- Save 400,000 kilowatt-hours by switching 500 streetlights to LEDs.

⁸ City of Ventura, Sustainable Ventura <<http://sustainableventura.wordpress.com/2011/10/07/sustainable-ventura/>>

4.14.3.3 IMPACT ANALYSIS

a. Thresholds of Significance

Appendix G of the *State CEQA Guidelines* does not contain checklist questions addressing energy impacts. Appendix F, Energy Conservation, requires only that “EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.” Appendix F suggests that environmental impacts may include:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials maybe discussed.
2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.
3. The effects of the project on peak and base period demands for electricity and other forms of energy.
4. The degree to which the project complies with existing energy standards.
5. The effects of the project on energy resources.
6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Based on the suggested determination of impacts contained in Appendix F of the *State CEQA Guidelines*, the following significance thresholds are used to evaluate project impacts related to energy.

- ENG-1 Would the project require new (off-site) energy supply facilities and distribution infrastructure, or capacity-enhancing alterations to existing facilities?
- ENG-2 Would the project require needed infrastructure not anticipated by adopted plans?
- ENG-3 Would project design and/or operation incorporate energy conservation measures?

b. Methodology

The following analysis conducted for electricity and natural gas impacts utilized PUC documents that project electricity and natural gas demand for California for the next 10 years.

c. Analysis, Mitigation Measures, and Residual Impacts

Westside Community Plan Development Code

One of the purposes of the Westside Community Development Code is to ensure that proposed development and new land uses conserve energy and natural resources. To facilitate this goal, the Westside Community Development Code would permit the development of a distribution generation facility within the Westside Community Plan Area. The facility would be a small or mid-scale energy generation facility. The term distribution generation facility is broad and encompasses advanced combustion technologies such as micro turbines, reciprocating engines and fuel cells, as well as non-combustion options like photovoltaic cells and wind turbines. Types of energy sources may include, but are not limited to, petroleum, methane, ethanol, thermal, wind, solar, hydro, and other possible non-radioactive sources.

Westside Redevelopment Project

Building standards within the Westside Redevelopment Area, including the area just south of and outside the boundary of the Westside Community Plan Area, will be the same as those for the City of Ventura as a whole. Building standards will be required to conform to the General Plan and zoning ordinance as currently adopted or amended from time to time, as well as other applicable codes and ordinances. In addition to the General Plan, zoning ordinances, and other state and local guidelines, building standards for the proposed Redevelopment Area will be regulated by the Westside Community Plan.

ENG-1 Would the project require new (off-site) energy supply facilities and distribution infrastructure, or capacity-enhancing alterations to existing facilities? (Class III, Not Significant)

Analysis

As shown in **Table 4.14.3-1, Proposed Project Electrical Demand**, the electricity consumption for the proposed Westside Community Planning Project would be 12.25 GWh per year. SCE is projected to deliver approximately 117,548 GWh per year by 2022. Development within the Westside Community Planning area would consume approximately 0.01 percent of total electricity SCE would deliver in 2022.

**Table 4.14.3-1
Proposed Project Electrical Demand**

Land Use	Size	Usage rate (kW-hr/sf/yr) ¹	Electrical Demand (kW-hr/yr)	Electrical Demand (GW-hr/yr)
Retail	100,641 sf	13.55	1,363,686	1.36
Office	163,450 sf	12.95	2,116,678	2.12
Industrial	77,000 sf	10.50	808,500	0.81
Residential	1,415 du	5,626.5	7,961,498	7.96
Total			12,250,361	12.25

Note:

¹ Usage rates utilized from the 1993 South Coast Air Quality Management District, CEQA Air Quality Handbook, Table A9-11-A.

kW-hr/sf/yr = kilowatt-hour per square foot per year; GW-hr/yr = gigawatt-hour per year

du = dwelling units; sf = square foot;

As shown in **Table 4.14.3-2, Proposed Project Natural Gas Demand**, the natural gas consumption is projected to be approximately 77.4 million cubic feet (mcf) for the proposed project. The natural gas demand for the SCGC service area for 2009 was 295 bcf and is projected to be 283 bcf by 2030. The proposed project would demand a less than 1 percent increase (0.03 percent) of the projected natural gas supplied by SCGC.

**Table 4.14.3-2
Proposed Project Natural Gas Demand**

Land Use	Size	Usage rate (cf/sf/mnth) ¹	Demand (cf/mnth)	Demand (mcf/yr)
Retail	100,641 sf	2.90	291,859	3.50
Office	163,450 sf	2.00	326,900	3.92
Industrial	77,000 sf	2.00	154,000	1.85
Residential	1,415 du	4,011.5	5,676,273	68.12
Total			6,449,031	77.39

Note:

¹ Usage rates utilized from the 1993 South Coast Air Quality Management District, CEQA Air Quality Handbook, Table A9-12-A.

Cf/sf/mnth = cubic feet per square foot per month; mcf/yr = million cubic feet per year

du = dwelling units; sf = square foot;

In accordance with California Energy Code Title 24, the new development within the Westside Community Planning area would be required to meet minimum energy-efficiency standards as identified in Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards (Section 12.115.010 of the Municipal Code) which provides energy conservation standards for

all new and renovated commercial and residential buildings constructed in California. This includes water, space heating, and cooling equipment; insulation for doors, pipes, walls, and ceilings; and appliances, to name a few. The Westside Community Plan encourages the use of alternate forms of transportation by designing streets for the automobile as well as the pedestrian and bicyclist. (Refer to **Section 4.13, Transportation and Circulation**, for more information.)

No specific development projects are proposed or analyzed at the project level in this program EIR at this time. Project-level review will be required for individual projects proposed within the Westside Community Planning Project Area. The City will review all development proposals prior to the approval of development plans to guarantee that sufficient energy resources and facilities are available to supply adequate energy to each proposed development project and associated uses. During the environmental review process for individual development proposals, SCE and SCGC would be contacted to determine potential impacts related to supply and infrastructure within the Westside Community Planning Area. Detailed final plans are required to be submitted to SCE and SCGC to ensure that project improvements do not conflict with existing facilities.

Impacts related to any requirement for new (off-site) energy supply facilities and distribution infrastructure, or capacity-enhancing alterations to existing facilities would be less than significant with implementation of energy conservation measures and adherence to the requirements of SCE and SCGC. Furthermore, the adoption of the Westside Community Plan, which is consistent with the General Plan, and any applicable General Plan policies, would result in less than significant impacts to energy infrastructure, and no mitigation measures are required. Impacts would be Class III, Not Significant.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Class III, Not Significant.

ENG-2 Would the project require needed infrastructure not anticipated by adopted plans? (Class III, Not Significant)

Analysis

SCE and SCGC have adequate capacity to meet future demand and have anticipated the development of new facilities within their service areas, including planned development in the City of Ventura. No

specific development projects are proposed at this time and analyzed at the project level in this program EIR. Project-level review will be required for individual projects proposed within the Westside Community Planning Project Area. Each project will be required to adhere to applicable energy conservation measures. The City will review all development proposals prior to the approval of development plans to guarantee that sufficient energy resources and facilities are available to supply adequate energy to each proposed development project and associated uses. During the environmental review process for individual development proposals, SCE and SCGC would be contacted to determine potential impacts related to supply and infrastructure within the Westside Community Planning Area. Detailed final plans are required to be submitted to SCE and SCGC to ensure that project improvements do not conflict with existing facilities.

Impacts related to any requirement for needed infrastructure not anticipated by adopted plans would be less than significant with implementation of energy conservation measures and adherence to the requirements of SCE and SCGC. Furthermore, the adoption of the Westside Community Plan, which is consistent with the General Plan, and any applicable General Plan policies, would result in less than significant impacts to energy infrastructure, and no mitigation measures are required. Impacts would be Class III, Not Significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Class III, Not Significant.

ENG-3 Would project design and/or operation incorporate energy conservation measures? (Class III, Not Significant)

Analysis

New development or redevelopment would be subject to Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards, which provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Westside Community Plan encourages the use of alternate forms of transportation by designing streets for the automobile as well as the pedestrian and bicyclist. (Refer to Section **4.13, Transportation and Circulation**, for more information.) As a result, impacts would be less than significant as new

development or redevelopment would be required to incorporate energy conservation standards. Impacts would be Class III, Not Significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Class III, Not Significant.

d. Cumulative Impacts

As stated in **Section 3.0, Project Description**, the proposed project would increase projected development within the Westside Community Planning Area above what was projected to occur by 2025 by 150 residential dwelling units, 49,005 square feet of retail uses, and 54,450 square feet of office uses. The growth projections of the project that exceed those anticipated for the Westside Community Planning area would consequently exceed the growth projections for the City through 2025. The increases in development permitted by the project would represent an increase in dwelling units of 1.77 percent, an increase in retail square feet of 3.78 percent), and an increase in office space of 4.30 percent. This increase is not considered substantial, and the impact would be less than significant.

SCE and SCGC have adequate capacity to meet future demand and have anticipated the development of new facilities within their service areas, including planned development in the City of Ventura. No specific development projects are proposed or analyzed at the project level in this program EIR at this time. Project-level review will be required for individual projects proposed within the Westside Community Planning Project Area. Furthermore, individual development proposals within the Westside Community Planning area and the City would be required to adhere to required energy conservation measures and SCE and SCGC would be contacted to determine potential impacts within the Westside Community Planning Area. Detailed final plans are required to be submitted to SCE and SCGC to ensure that project improvements do not conflict with existing facilities.

Cumulative impacts would be Class III, Not Significant. Therefore, the Westside Community Planning Project's contribution to cumulative impacts would not be cumulatively considerable, and cumulative impacts would be Class III, Not Significant.