5.14 ENERGY

5.14.1 INTRODUCTION

The purpose of this section is to evaluate the potential impacts on energy. The California Environmental Quality Act (CEQA) provides that environmental impact reports (EIRs) shall include a detailed statement on significant effects of a project and "[m]itigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy."[1] The *State CEQA Guidelines* discuss the requirements for an EIR to address potentially significant effects, and although it does not include energy specifically, it mentions the use of nonrenewable resources.[2] The *State CEQA Guidelines* require an EIR to discuss energy conservation measures, if relevant.[3] Appendix F to the guidelines addresses energy conservation goals, notes that potentially significant energy implications of a project should be considered in an EIR, and contains general examples of mitigation measures for a project's potentially significant energy impacts.[4]

5.14.2 SUMMARY OF 2030 GENERAL PLAN EIR FINDINGS

The primary sources of greenhouse gas (GHG) emissions related to urban development in Porterville are anticipated to continue to be from the combustion of fossil fuels by motor vehicles and from electric power generation. To a lesser extent, agricultural activities in the planning area produce GHGs that would contribute to global warming. Short-term impacts are also anticipated from construction activity that would occur during buildout under the General Plan. Because the generation of GHGs is, for the most part, related to growth, policies that reduce energy consumption and fuel usage can have a positive effect. In addition to promoting development patterns that would reduce the vehicles miles traveled per capita, the General Plan proposes a variety of other actions that can reduce emissions that contribute to climate change and global warming, including green building measures, tree planting, energy conservation in new construction, and energy management in public buildings.

5.14.3 EXISTING CONDITIONS

Background

Energy usage is typically quantified using the British thermal unit (BTU). As a point of reference, the approximate amount of energy contained in common energy sources are as follows: gasoline,

1 Public Resources Code Section 21000(b)(3).

2 California Code of Regulations, Title 14, Division 6, Chapter 3, *State CEQA Guidelines*, Section 16126.2.

3 California Code of Regulations, Title 14, Division 6, Chapter 3, *State CEQA Guidelines*, Appendix F.

4 California Code of Regulations, Title 14, Division 6, Chapter 3, *State CEQA Guidelines*, Section 15126.4(a)(1)(C).

125,000 BTUs per gallon; natural gas, 100,000 BTUs per therm; electricity, 3,413 BTUs per kilowatt-hour (kWh).[5]

Total energy usage in California was 8,360 trillion BTUs in 2007, which equates to an average of 232 million BTUs per capita. Of California's total energy usage, the breakdown by sector is 39 percent transportation, 24 percent industrial, 18 percent residential, and 19 percent commercial. Petroleum satisfies 55 percent of California's energy demand, natural gas 32 percent, and electricity 12 percent. Coal fuel accounts for less than 1 percent of California's total energy demand.[6] Electric power and natural gas in California are generally consumed by stationary users, whereas petroleum consumption is generally accounted for by transportation-related energy use.[7]

Given the nature of the proposed project as a commercial shopping center, the remainder of this discussion will focus on the three sources of energy that are most relevant to the project—namely, electricity and natural gas for commercial uses, and transportation fuel for vehicle trips associated with commercial uses planned for the project.

Electricity

Californians consumed 285,574 gigawatt hours of electricity in 2008. This electricity was produced from power plants fueled by natural gas (45.7 percent), coal (18.2 percent), hydro (11 percent), nuclear (14.4 percent), and renewables such as wind, solar, biomass, and geothermal (10.6 percent).[8]

Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of electricity-consuming devices within a building. The average annual usage of electricity is roughly 13 kWh per square foot (kWh/sf) for all commercial buildings.[9]

Electricity supply in California involves a complex grid of power plants and transmission lines located in the western United States, Canada, and Mexico. The issue is complicated by market forces that have become prominent since 1998, when a new regulatory environment commonly referred to as

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5 Pacific Northwest National Laboratory, "Energy Terms/Conversions," http://www.pnl.gov/conserveenergy/terms.stm.

6 Energy Information Administration, "Official Energy Statistics from the U. S. Government," http://tonto.eia.doe.gov/state/state_energy_profiles.cfm?sid=CA.

7 U.S. Department of Energy, Energy Information Administration Web site (Official Energy Statistics from the U.S. Government – State Data), http://www.eia.doe.gov/emeu/states/_states.html.

8 California Energy Commission, *2009 Integrated Energy Report*, September 2009.

9 City of San Jose, "Costco Wholesale Warehouse Project, Draft Environmental Impact Report," February 2006 http://www.sanjoseca.gov/planning/eir/eir.asp.

"deregulation" took effect in California. Supply is further complicated by the fact that the peak demand for electricity is significantly higher than the off-peak demand. For example, in August 2004, peak electric demand—due in large part to hot weather—reached a record high of 44,497 megawatts, which is almost double the lowest demand period.[10]

In 2000–2001, electricity demand exceeded supply on various occasions, which required utilities to institute systematic rotating outages to maintain the stability of the grid and prevent widespread blackouts. In addition, the power shortages were exacerbated by inadequate transmission capacity between northern and Southern California. Since that time, additional generating capacity has come online and upgrades to various transmission lines are being constructed. According to the California Energy Commission's (CEC) *2005 Integrated Energy Policy Report*, California could face severe electricity shortages over the next few years, especially during the peak-demand summer months, unless aggressive actions are taken to bring new generation online.[11]

In an effort to minimize power shortages, the CEC and California Public Utilities Commission (CPUC) have initiated a number of programs to increase supplies and reduce demand for electricity. On the demand side, they are strongly encouraging reductions in electricity demand through energy-efficiency measures, particularly those that provide peak-demand savings.[12] For example, Senate Bill (SB) 1307 requires all electric utilities to meet their unmet resource demands first through energy efficiency and demand reduction. In addition, the Governor's Green Building Initiative (Executive Order [EO] S-20-04) sets a goal of reducing energy use in state-owned buildings by 20 percent by 2015, and directs the CEC to refine Title 24 energy efficiency standards for building to meet the same goal.[13]

In September 2006, the governor signed Assembly Bill (AB) 32, The Global Warming Solutions Act of 2006, which directs the California EPA to work with state agencies to implement a cap on GHG emissions (primarily carbon dioxide) from stationary sources such as electric power generation facilities, and industrial, commercial, and waste disposal sectors. Since carbon dioxide emissions are directly

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10 California High Speed Rail Authority and the Federal Railroad Administration, "California High-Speed Train, Final Program Environmental Impact Report/Environmental Impact Statement," August 2005, http://www.cahighspeedrail.ca.gov/eir_final/pdf/vol_1/title-toc.pdf.

11 California Energy Commission, "2005 Integrated Energy Policy Report," November 2005. http://www.energy.ca.gov/2005_energypolicy/index.html.

12 State of California, Energy Commission and Public Utilities Commission, "Energy Action Plan II – Implementation Roadmap for Energy Policies," September 21, 2005. http://www.energy.ca.gov/energy_action_plan/2005-09-21_EAP2_FINAL.PDF

13 California Energy Commission Web site (Green Building Initiative – State of California Executive Order S-20-0) http://www.energy.ca.gov/greenbuilding/index.html

proportional to fossil fuel consumption, the cap on emission is expected to have the incidental effect of forcing a reduction in fossil fuel consumption from these stationary sources.

On the supply side, the CEC and CPUC are actively promoting alternative energy sources such as solar, wind, and bioenergy (including "transformation" or waste-to-energy, which converts agricultural by-products such as animal waste to usable energy).[14] In January 2006, the CPUC approved the California Solar Initiative, under which the CEC will manage a program of financial incentives, involving cash rebates, for installation of solar electricity systems in new residential construction.[15]

The CEC's Energy Action Plan II, adopted in 2005, identifies a number of other initiatives for increasing supply and reducing demand. One example involves the reduction of peak energy demand for the state's water supply infrastructure, which comprises almost 20 percent of the state's electricity consumption.[16]

Natural Gas

In 2007, California used an average of over 6.9 billion cubic feet of natural gas per day.[17] The natural gas was used to produce electricity (50 percent), and used in industrial uses (18 percent), commercial uses (9 percent), and in residential uses (22 percent). Approximately 14 percent of the natural gas was produced within California, with the balance imported from other western states (63 percent) and Canada (23 percent).[18]

As noted, natural gas is used to generate almost 50 percent of electricity used in California. This results in peak seasonal demands for natural gas not only during the winter months for heating but also during the peak electricity-demand period in summer when cooling needs are greatest.[19]

Natural gas usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all gas-consuming

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14 State of California, Bioenergy Interagency Working Group, Recommendations for a Bioenergy Plan for California, April 2006 http://www.energy.ca.gov/2006publications/CEC-600-2006-004/CEC-600-2006- 004-F.PDF

15 California Public Utilities Commission Web site (About the California Solar Initiative). http://www.cpuc.ca.gov /static/energy/solar/aboutsolar.htm

16 State of California, Energy Commission and Public Utilities Commission, "Energy Action Plan II – Implementation Roadmap for Energy Policies," September 21, 2005. http://www.energy.ca.gov/energy_action _plan/2005-09 21_EAP2_FINAL.PDF

17 California Energy Commission, "Energy Consumption Data Management System," http://ecdms.energy.ca.gov /elecbycounty.asp#results

18 California Energy Commission Web site (California's Natural Gas Facts and Figures). http://www.energy.ca.gov /naturalgas/natural_gas_facts.html

19 California Energy Commission, "2005 Integrated Energy Policy Report," November 2005. http://www.energy.ca .gov/2005_energypolicy/index.html

devices within a building. The average annual usage of natural gas is roughly 37 cubic feet/square foot for all commercial buildings.[20]

Recent technological advancements in exploration, drilling, and hydraulic fracturing have transformed shale formations from marginal natural gas producers to substantial and expanding contributors to the natural gas portfolio. Recoverable shale reserve estimates range as high as 842 trillion cubic feet, a 37-year supply at today's consumption rates. While natural gas production from shale formations has significantly increased domestic production, there is ongoing investigation of potential environmental concerns related to shale gas development, including carbon emissions and possible groundwater contamination. As recently as two years ago, domestic natural gas production and imports to California were on the decline, and liquefied natural gas was seen as a source to better serve the natural gas needs of California. The recent development of natural gas shale formations has contributed to increased domestic production of natural gas, and liquefied natural gas does not seem to be a priority fuel for California at this time.[21]

The state's highest priority is in promoting efforts to reduce demand. To this end, the CPUC has set aggressive goals to double annual natural gas savings by 2008 and triple savings by 2013. Reductions in natural gas use in residential and non-residential buildings have been implemented since 1978 through California's Energy Efficiency Standards for Residential and Non-Residential Buildings (Title 24) and since 1977 by the Appliance Efficiency Regulations (Title 20), which are updated regularly to reflect policy mandates and advances in feasible technologies. As noted above, the governor's Green Building Initiative mandates a 20 percent overall reduction in energy consumption in buildings by 2015. Reductions in the natural gas usage are also expected through increased efficiencies in the generation of electricity, and through efforts to increase the use of alternative sources of power.[22]

Transportation Fuel

In 2002, California drivers used about 15 billion gallons of gasoline, or 980 thousand barrels per day, representing 11.2 percent of U.S. gasoline demand.[23] The state projects annual gasoline demand to increase to 17.3 billion gallons by 2010, growing an average 1.8 percent per year.[24] The nation currently cannot provide for all of its petroleum demand with domestically produced crude oil. The decline in

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20 City of San Jose, "Costco Wholesale Warehouse Project, Draft Environmental Impact Report," February 2006. http://www.sanjoseca.gov/planning/eir/eir.asp

21 California Energy Commission, 2009 Integrated Energy Report, September 2009.

22 Los Angeles Times, "Opening the Spigot for Liquid Natural Gas Imports," August 29, 2008.

23 Energy Information Agency. *California Gasoline Study Final Report*, November 2003.

24 Energy Information Agency. *California Gasoline Study Final Report,* November 2003.

domestic oil production, coupled with a rise in oil consumption, resulted in net imports of crude oil and petroleum products surpassing 11.8 million barrels per day in 2004.[25] Imports reached an all-time high of just over 12.9 million barrels per day in 2004, of which over 40 percent had originated from countries belonging to the Organization of Petroleum Exporting Countries (OPEC).[26] Motor gasoline accounted for nearly 50 percent (8.9 million barrels per day) of the 20 million barrels per day of petroleum products consumed domestically in 2004.[27]

In California, petroleum use accounts for approximately 42 percent of all energy consumption. Californians presently consume roughly 49.5 million gallons of gasoline and diesel each day. This is a 53 percent increase over 20 years ago.[28] The primary factors contributing to this increase are (1) population growth; (2) declining per-mile cost of gasoline; (3) land use patterns that have increased the distance between jobs and housing; and (4) a shift in consumer preferences to larger, less fuel-efficient motor vehicles.[29]

Approximately 53 percent of petroleum use is for motor vehicle fuel. The average fuel economy for the fleet of light-duty vehicles (autos, pickups, vans, and SUVs) steadily increased from about 12.6 miles per gallon (mpg) in the mid-1970s to 20.7 mpg today.

Although no new refineries have been constructed in California since 1969, supply has kept pace with demand though a combination of refinery upgrades/modernizations and out-of-state imports.[30]

According to the CEC,[31] the demand for gasoline and diesel for on-road vehicles is projected to increase by 36 percent over the next 20 years. Imports of foreign crude oil will increase as in-state and Alaskan supplies diminish. Since California refineries are already operating close to their full capacity, daily imports of refined gasoline and diesel are expected to double over the next 20 years. Unless out-of-state facilities expand, the gasoline and diesel markets will become increasingly volatile, with the likelihood of shortages and more prolonged periods of high prices.

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25 Energy Information Administration. *Household Vehicles Energy Use: Latest Data and Trends*. November 2005.
26 Energy Information Administration. *Household Vehicles Energy Use: Latest Data and Trends*. November 2005.
27 Energy Information Administration. *Household Vehicles Energy Use: Latest Data and Trends*. November 2005.
28 Energy Information Administration. *Household Vehicles Energy Use: Latest Data and Trends*. November 2005.
29 Energy Information Administration. *Household Vehicles Energy Use: Latest Data and Trends*. November 2005.
30 Western States Petroleum Association (WSPA). 2008. Accessed July 11, 2008, http://cpr.ca.gov/updates/archives/pdf/09_17_2004/Panel%20Testimony/SPARANO.TESTIMONY.pdf.
31 California Energy Commission, *2003 Integrated Energy Policy Report*.

Project Site

The project site is currently vacant and undeveloped, and therefore no fuel consumption occurs on the project site.

5.14.4 REGULATORY PLANS AND POLICIES

Since the energy crisis of the 1970s, efforts to promote and require energy conservation and alternatives have been embodied by numerous plans, policies, programs, and regulations promulgated at the federal, state, regional, and local levels. Those, which are most relevant to the project, are briefly described below.

Federal

Energy Policy and Conservation Act

Enacted in 1975, this legislation established fuel economy standards for new light-duty vehicles sold in the United States. The law placed responsibility on the National Highway Traffic and Safety Administration (a part of the U.S. Department of Transportation) for establishing and regularly updating vehicle standards. The U.S. Environmental Protection Agency (U.S. EPA) administers the Corporate Average Fuel Economy (CAFE) program, which determines vehicle manufacturers' compliance with existing fuel economy standards. Since the inception of the CAFE program, the average fuel economy for new light-duty vehicles (autos, pickups, vans, and SUVs) steadily increased from 13.1 mpg for the 1975 model year to 21.0 mpg for the 2005 model year.[32]

Energy Policy Act of 2005

Passed by Congress in July 2005, the Energy Policy Act includes a comprehensive set of provisions to address energy issues. The act includes tax incentives for the following: energy conservation improvements in commercial and residential buildings; fossil fuel production and clean coal facilities; and construction and operation of nuclear power plants, among other things. Subsidies are also included for geothermal, wind energy, and other alternative energy producers. It directs the Department of Energy to study and report on alternative energy sources such as wave and tidal power, and includes funding for hydrogen research. The act also increases the amount of ethanol required to be blended with gasoline, and extends daylight saving time (to begin earlier in spring and end later in fall) to reduce lighting requirements. It also requires the federal vehicle fleet to maximize use of alternative fuels. The Act further includes provisions for expediting construction of major energy transmission corridors, such as

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[32] U.S. Environmental Protection Agency," Light-Duty Automotive Technology and Fuel Economy Trends: 1975 through 2005," July 2005 http://www.epa.gov/otaq/cert/mpg/fetrends/420s05001.htm.

high-voltage power lines, and fossil fuel transmission pipelines. These are just a few examples of the provisions contained in the act.[33]

Energy Independence and Security Act of 2007

Signed into law in December 2007, this broad energy bill most notably included an increase in auto mileage standards, and also addressed biofuels, conservation measures, and building efficiency. The bill amended the CAFE standards to mandate significant improvements in fuel efficiency (i.e., average fleetwide fuel economy of 35 miles per gallon by 2020, versus the previous standard of 27.5 mpg for passenger cars and 22.2 mpg for light trucks).[34] Another provision includes a mandate to increase use of ethanol and other renewable fuels by 36 billion gallons by 2022, of which 21 million gallons is to include advanced biofuels, largely cellulosic ethanol, that have 50 to 60 percent lower GHG emissions. The bill also includes establishment of a new energy block grant program for use by local governments in implementing energy-efficiency initiatives, as well as a variety of green building incentives and programs, among other things.[35]

EnergyStar Program

In 1992, the U.S. EPA introduced Energy Star as a voluntary labeling program designed to identify and promote energy-efficient products to reduce GHG emissions. The program applies to major household appliances, lighting, computers, and building components such as windows, doors, roofs, heating and cooling systems. Under this program, appliances that meet specifications for maximum energy use established under the program are certified to display the Energy Star label. In 1996, U.S. EPA joined with the Energy Department to expand the program, which now also includes qualifying commercial and industrial buildings, and homes.[36]

Income Tax Credits

Federal income tax credits are available to individuals for installation of qualified energy conservation features in the home such as insulation, replacement windows, and certain high-efficiency heating and cooling equipment. Additional tax credits are available for qualified solar water heating and photovoltaic systems, and also for qualified fuel cell and microturbine systems. Tax credits are also available to buyers

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33 United States Congress, Energy Policy Act of 2005 (Public Law 109-58), passed July 29, 2005. http://thomas.loc.gov/cgi-bin/query/z?c109:H.R.6.

34 San Francisco Chronicle, December 14, 2007, page A3. See also http://www.whitehouse.gov/news/releases/2007/12/20071219-1.html, and http://www.nhtsa.dot.gov/cars/rules/cafe/overview.htm.

35 American Planning Association, *APA Advocate*, January 7, 2008.

36 EnergyStar Web site (History of EnergyStar), http://www.energystar.gov/index.cfm?c=products.pr_tax_credits

of designated fuel-efficient vehicles such as hybrid gasoline-electric, diesel, battery-electric, alternative fuel, and fuel cell vehicles. Builders of homes and commercial buildings that incorporate energy-efficient materials, as well as manufacturers of certain products designed to meet EnergyStar standards, also qualify for tax credits.[37]

State

Energy Action Plan

In 2003, the three key energy agencies in California— the CEC, the California Power Authority (CPA), and the CPUC— jointly adopted an Energy Action Plan (EAP) that listed goals for California's energy future and set forth a commitment to achieve these goals through specific actions. In 2005, the CPUC and the CEC jointly prepared the EAP II to identify the further actions necessary to meet California's future energy needs. EAP II describes the priority sequence for actions to address increasing energy needs, also known as "loading order." The loading order identifies energy efficiency and demand response as the state's preferred means of meeting growing energy needs. After cost-effective efficiency and demand response, the state is to rely on renewable sources of power and distributed generation, such as combined heat and power applications. To the extent that efficiency, demand response, renewable resources, and distributed generation are unable to satisfy increasing energy and capacity needs, the EAP II supports the use of clean and efficient fossil-fired generation. The plan recognizes that concurrent improvements are required to the bulk electricity transmission grid and distribution facility infrastructure to support growing demand centers and the interconnection of new generation, both on the utility and customer side of the meter. The EAP II identifies key actions to be taken in all of these areas in order to meet the state's growing energy requirements. The plan recommendations are implemented by the governor through executive orders, by the legislature through new statutes, and by the responsible state agencies through regulations and programs. Progress on EAP II implementation is reported in successive biennial updates of the plan.[38]

Title 24 (California Energy Code)

The California Energy Code (Title 24, Part 6, of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings), provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The

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37 EnergyStar Web site (Federal Tax Credits for Energy Efficiency), http://www.energystar.gov/index.cfm?c=products.pr_tax_credits

38 State of California, Energy Commission and Public Utilities Commission, "Energy Action Plan II – Implementation Roadmap for Energy Policies," September 21, 2005. http://www.energy.ca.gov/energy_action_plan/2005-09-21_EAP2_FINAL.PDF.

provisions of the California Energy Code apply to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances; they also give guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls, and ceilings. The CEC adopted the 2005 changes to Building Efficiency Standards, which emphasized saving energy at peak periods and seasons, and improving the quality of installation of energy-efficiency measures. It is estimated that implementation of the 2005 Title 24 standards have resulted in an increased energy savings of 8.5 percent relative to the previous Title 24 standards. Compliance with Title 24 standards is verified and enforced through the local building permit process.[39] The 2008 Title 24 Standards, which had an effective date beginning August 1, 2009, include added provisions that require, for example, "cool roofs" on commercial buildings; increased efficiency in heating, ventilating, and air conditioning systems; and increased use of skylights and more efficient lighting systems.[40]

California Green Building Standards Code

On July 17, 2008, the California Building Standards Commission adopted the California Green Building Standards Code for all new construction statewide. Scheduled to take effect in 180 days, the code will be voluntary until 2010, when its provisions are expected to become mandatory. The voluntary period is intended to give builders, local governments, and communities time to adapt to the new rules. The code sets targets for energy efficiency; water consumption; dual plumbing systems for potable and recyclable water; diversion of construction waste from landfills, and use of environmentally sensitive materials in construction and design, including eco-friendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels.

Green Building Initiative

In December 2004, the governor signed EO S-20-04 (Green Building Initiative) to establish energy- and resource-efficiency in building construction. The EO sets a goal of reducing energy use in state-owned buildings by 20 percent by 2015, and directs the CEC to refine Title 24 energy-efficiency standards for building to meet the same goal.[41] In November 2009, Governor Schwarzenegger signed Executive Order

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39 California Energy Commission Web site (2005 Building Efficiency Standards), http://www.energy.ca.gov/title24/2005standards/index.html.

40 California Energy Commission Web site, http://www.energy.ca.gov/title24/.

41 California Energy Commission Web site (Green Building Initiative – State of California Executive Order S-20-0) http://www.energy.ca.gov/greenbuilding/index.html.

S-14-08, which was designed to simplify California's renewable energy project approval process and increase the state's renewable portfolio standard to 33 percent renewable power by 2020.[42]

Part 11 of the Title 24 Building Standards Code is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality."[43] The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). The CBSC has released a *2010 Draft California Green Building Standards Code* on its website.[44] This update to Part 11 of the Title 24 Building Standards Code will be effective on January 1, 2011. Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code.

California Greenhouse Gas Bill

The California Greenhouse Gas Bill (AB 1493), signed into law in July 2002, requires the California Air Resources Board (CARB) to develop and adopt regulations that achieve maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks.[45] In response, CARB adopted landmark regulations in 2004 limiting GHG emissions from new vehicles sold in California beginning in the 2009 model year. New vehicles complying with this regulation will consume nearly 30 percent less fuel than vehicles built before 2009. The bill includes incentives for vehicle manufacturers to take early action. Assuming these regulations are not overturned in the courts, they could result in significant reductions in the demand for transportation fuel in California.[46] In December 2007, the U.S. District Court in Fresno upheld California's right to regulate GHG emissions.[47] However, later that same month, the U.S. EPA refused to grant California a waiver under the federal Clean Air Act, which would have allowed it to enforce the AB 1493 regulations. The U.S. EPA position was that the recently increased fuel

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42 Office of the Governor, Newsroom, website accessed January 22, 2009. http://gov.ca.gov/index.php?/press-release/13273/

43 California Building Standards Commission, 2008 California Green Building Standards Code, (2009) 3.

44 California Building Standards Commission, "CALGreen," http://www.bsc.ca.gov/CALGreen/default.htm. 2010.

45 State of California, Assembly Bill No. 1493, Pavely (Vehicular emissions: greenhouse gases) http://www.arb.ca.gov/cc/ab1493.pdf.

46 California Energy Commission, "2005 Integrated Energy Policy Report," November 2005, http://www.energy.ca.gov/2005_energypolicy/index.html

47 *San Francisco Chronicle*, December 13, 2007, p. A1.

economy standards under the Energy Independence and Security Act of 2007, passed early the same month, made the California law unnecessary.[48]

Million Solar Roofs Bill

The Million Solar Roofs Bill (SB 1), enacted in August 2006, complements the California Solar Initiative established by CPUC in January 2006 with a goal of building a million solar roofs in 10 years. The main components of the bill include increasing the amount of credit solar customers can receive for excess power generated by their solar systems, mandating solar panels as an option for new home buyers while their house is being constructed, and mandating that municipal utilities create their own rebate programs.[49]

Renewable Portfolio Standard (RPS) SB 1078 and SB 17)

Originally enacted under SB 1078 in 2002, this bill required electric utility corporations to increase procurement of power generated through eligible renewable energy resources until a target of 20 percent of total generation was reached in 2017. In 2006, SB 17 accelerated this timetable to require the 20 percent renewables target to be reached in 2010.[50] In November 2009, Governor Schwarzenegger signed Executive Order S-14-08, which was designed to simplify California's renewable energy project approval process and increase the state's renewable portfolio standard to 33 percent renewable power by 2020.[51]

California Global Warming Solutions Act of 2006

In September 2006, the governor signed AB 32, The Global Warming Solutions Act of 2006, which mandates that California's GHG emissions be reduced to 1990 levels by 2020. The act directs the California EPA to work with state agencies to implement a cap on GHG emissions (primarily carbon dioxide) from stationary sources of such as electric power generation facilities, and industrial, commercial, and waste-disposal sectors. Since carbon dioxide emissions are directly proportional to fossil fuel consumption, the cap on emissions is expected to have the incidental effect of forcing a reduction in fossil fuel consumption from these stationary sources. Specifically, AB 32 directs the California EPA to work with other state agencies to accomplish the following: (1) promulgate and implement GHG

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48 *San Francisco Chronicle*, December 20, 2007, p. A1.

49 "Million Solar Roof Bill (SB 1) Signed Into Law," Energy Program News, Environment California, August 21, 2006. http://www.environmentcalifornia.org/newsroom/energy/energy-programnews/million-solar-roofs-bill-sb-1-signed into-law

50 California Public Utilities Commission, "California Renewables Portfolio Standard (RPF)," http://www.cpuc.ca.gov/puc/energy/electric/renewableenergy/

51 Office of the Governor, Newsroom, Web site accessed January 22, 2009. http://gov.ca.gov/index.php?/press-release/13273/

emissions cap for the electric power, industrial, and commercial sectors through regulations in an economically efficient manner; (2) institute a schedule of greenhouse gas reductions; (3) develop an enforcement mechanism for reducing GHG; (4) establish a program to track and report GHG emissions.[52]

Regional

San Joaquin Valley Air Pollution Control District

Although the San Joaquin Valley Air Pollution Control District (SJVAPCD) is not directly involved in the regulation of energy use, a number of emission-reduction measures recommended by the SJVAPCD for inclusion in development projects have the incidental effect of conserving energy resources. Examples of the measures recommended include extensive planting of shade trees to reduce summer cooling requirement, inclusion of sidewalk and bikeway networks and connections to encourage walking and bicycling, use of reflective roofing material, passive solar and heating designs, daylighting (natural lighting) systems such as skylights, use of incentives to encourage carpooling and other transportation alternatives, and use of solar thermal electricity systems.[53] The enactment of the SJVAPCD's Indirect Source Review (ISR) Rule in March 2006 provides added incentive for developers to incorporate these types of measures in order to reduce their estimated air pollutant emissions, and thereby reduce the offset fees required under the ISR.

Local

City of Porterville 2030 General Plan

The Open Space and Conservation Element of the *Porterville 2030 General Plan*[54] contains the following guiding policies and implementation policies that are relevant to law enforcement. Guiding policies are the City's statements of its goals and philosophy.[55] Implementation policies represent commitments to specific actions and refer to existing programs or call for the establishment of new programs.[56]

OSC-G-10 Reduce and conserve energy use in existing and new commercial, industrial, and public structures.

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52 Assembly Bill 32, Passed August 31, 2006, http://www.arb.ca.gov/cc/docs/ab32text.pdf.

53 San Joaquin Valley Air Pollution Control District, Comments on Draft Environmental Impact Report (DEIR) for the Lodi Shopping Center, September 24, 2004.

54 City of Porterville, *2030 General Plan*, Chapter 6, "Open Space and Conservation Element," 147.

55 City of Porterville, *2030 General Plan*, Chapter 1, "Introduction," 15.

56 City of Porterville, *2030 General Plan*, Chapter 1, "Introduction," 15.

OSC-I-66 Adopt guidelines and incentives for using green building standards in new construction. Green building design guidelines may include required and recommended "green" design and construction strategies including: Building Site and Form, Natural Heating or Cooling, Transportation, Building Envelope and Space Planning, Building Materials, Water Systems, Electrical Systems, HVAC Systems, Construction Management, and Commissioning.

OSC-I-67 Incorporate cost-effective energy conservation measures into all building programs owned by the City, including construction, operations, and maintenance. Strategies will include conducting periodic energy audits of public buildings.

OSC-I-68 Publish best practices guide to saving energy on the City's website and other City publications.

OSC-I-69 Establish regulations to allow flexibility in site planning, solar orientation, roof design, and landscaping to decrease summer cooling and winter heating needs.

OSC-I-70 Ensure City codes allow for environmentally acceptable alternative forms of energy production and green building techniques.

5.14.5 THRESHOLDS OF SIGNIFICANCE

Based on the *State CEQA Guidelines*,[57] the project would be considered to result in a significant public services impact if it would

- result in the wasteful, inefficient or unnecessary consumption of energy; or
- result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.

In addition, Appendix F of the *State CEQA Guidelines* states that the means of achieving the goal of energy conservation includes the following:

- decreasing overall per capita energy consumption;
- decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- increasing reliance on renewable energy sources.

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57 California Public Resources Code, Title 14, Division 6, Chapter 3, *California Environmental Quality Act Guidelines*, Section 15126.4(a)(1).

Methodology

Information was received from CEI Engineering Associates, Inc., detailing the utility loads for two Walmart stores of a similar size to the proposed Walmart (approximately 180,000 square feet). One of these stores was located in Anderson, South Carolina, and the other in American Canyon, California. For a conservative estimate, the highest monthly average for each store was used for the following analysis. Therefore, based on the provided information, the proposed Walmart would consume approximately 430,257 kilowatt-hours per month (kWh/month) and 2,997 therms per month (thm/month).[58]

Estimates for the outlot's electrical usage are calculated based on the national average of 13 kilowatt-hours per square foot per year (kWh/ft²/yr) for commercial uses. The outlot's demand for natural gas was estimated using the national average of 0.37 therms per square foot per year (thm/sf/yr).

5.14.6 PROJECT IMPACTS

Impact 5.14-1 **Construction and operation of the proposed project would increase the use of energy resources on the project site but would not result in its wasteful, inefficient or unnecessary consumption.** ***Therefore, impacts would be less than significant.***

Implementation of the proposed project would introduce energy usage on a site that is currently undeveloped and, thus, uses no energy. The implementation of the project would consume large amounts of energy in both the short term during project construction and in the long-term during project operation.

Construction Phase Energy Requirements

During construction, the project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass. These are discussed below.

Energy Consumed by Construction Vehicles and Equipment

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, and construction. Fuel energy consumed during construction would be temporary in nature and would not represent a significant demand on energy resources.

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58 CEI Engineering Associates, Inc., Barry Lindner, PE. July 2009.

Energy Conservation During Construction

Some incidental energy conservation would occur during construction through implementation of the noise mitigation measures identified in **Section 5.7, Noise**, of this draft EIR. For example, there would be some fuel savings resulting from the prohibition of unnecessary idling of vehicles and equipment, and from the requirement that equipment be properly maintained. In addition, the mitigation measures listed in **Section 5.1, Air Quality,** include a requirement that equipment not in use for more than 10 minutes be turned off.

Construction materials could include recycled materials and products originating from nearby sources in order to reduce costs of transportation. Also, given rising fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.

Bound Energy Contained in Construction Materials

Substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than non-recycled materials. The incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest in minimizing the cost of doing business.

Walmart uses 100 percent recycled structural steel in each new building. This requires 50 percent less energy to manufacture than new steel and eliminates the need to consume energy in ore mining and processing. In addition, much of the baseboards and shelving in each new store is composed of recycled plastic. Therefore, it is expected that other retail users would adopt similar practices and that materials used in construction would not involve the wasteful, inefficient, or unnecessary consumption of energy.

Operational Phase Energy Use

The operational phase would consume energy for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, electronics, office equipment, and commercial machinery (including kitchen appliances). Operational energy would also be consumed during each vehicle trip associated with these proposed uses. The following discussion of operational energy use

begins with a discussion of on-site energy use and conservation measures, which is followed by a discussion of transportation energy use and conservation.

On-Site Energy Requirements

The proposed project would consume energy for interior and exterior lighting, heating/ventilating/air conditioning (HVAC), refrigeration, home electronics systems and appliances, and security systems, among other things.

As detailed above, the Walmart portion of the project would consume approximately 430,257 kWh/month,[59] or 4,440,252 kWh/yr of electricity. The remaining 41,252 square feet associated with the outlot buildings would consume 536,276 kWh/yr based on the national average of 13 kWh/sf/year for commercial uses. Therefore, the total project electrical usage would total 4,976,528 kWh/yr, which is equivalent to approximately 17 billion BTUs per year.[60] This represents approximately 0.0013 percent of Tulare County's total electrical consumption in 2007 of 3,781 million kWh.[61]

As detailed above, the Walmart portion of the project would consume approximately 2,997 thm/month,[62] or 30,924 thm/yr of natural gas. The remaining 41,252 square feet associated with the outlot buildings would consume 15,263 thm/yr based on the national average of 0.37 thm/sf/year for commercial uses. Therefore, the total project natural gas usage would total 46,187 thm/yr, which is equivalent to approximately 4.6 billion BTUs per year.[63] This represents approximately 0.0003 percent of Tulare County's total natural gas consumption in 2007 of 145,876,373 thm.[64]

Table 5.14-1, Project Electrical and Natural Gas Usage, details the project electrical and natural gas usage which would total approximately 21.6 billion BTUs per year.

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59 CEI Engineering Associates, Inc., Barry Lindner, PE. July 2009.

60 1 kWh = 3,413 BTU

61 California Energy Commission, "Energy Consumption Data Management System," http://www.ecdms.energy.ca.gov/elecbycounty.asp.

62 CEI Engineering Associates, Inc., Barry Lindner, PE. July 2009.

63 1 Therm = 100,000 BTU

64 California Energy Commission, "Energy Consumption Data Management System," http://www.ecdms.energy.ca.gov/gasbycounty.asp#results.

Table 5.14-1
Project Electrical and Natural Gas Usage

Land Use	Square Footage	Generation Rate	Energy Usage per Year	BTUs per Year
Electricity				
Walmart	161,602	370,021 kWh/month	4,440,252 kWh	15.2 billion
Outlots	41,252	13 kWh/sf/year	536,276 kWh	1.8 billion
Total Electrical	**202,854**	**-**	**4,976,528 kWh**	**17 billion**
Natural Gas				
Walmart	161,602	2,577 thm/month	30,924 thm	3.1 billion
Outlots	41,252	0.37 thm/sf/year	15,263 thm	1.5 billion
Total Natural Gas	**202,854**	**-**	**46,187 thm**	**4.6 billion**
			Total BTUs	**21.6 billion**

Source: Impact Sciences, Inc., 2010.

On-Site Energy Conservation

In accordance with California Energy Code Title 24,[65] the project would be required to meet minimum energy-efficiency standards for non-residential construction. This includes standards for water and space heating and cooling equipment; insulation for doors, pipes, walls and ceilings; and appliances, to name a few. The project would also be eligible for rebates and other financial incentives from both the electric and gas providers for the purchase of energy-efficient appliances and systems, and would further reduce the overall operational energy demand of the project.

As an example of energy conservation practices to be employed at the project, the Walmart store is designed to include a number of energy-conserving features, which exceed the requirements of Title 24. These include, but are not limited to, the use of skylights, energy-efficient HVAC units, solar-reflective roofing materials, energy-efficient lighting systems, and the reclamation of the "heat of rejection" from refrigeration equipment to generate hot water. Further information about these practices include:

65 California Code of Regulations, California Energy Code, Title 24, Part 6,

Energy and Resource Conservation

Lighting

- The entire store will include occupancy sensors in most non-sales areas, including restrooms, break rooms, and offices. The sensors automatically turn the lights off when the space is unoccupied.

- Interior Lighting: All lighting in the store will be T-8 fluorescent lamps and electronic ballasts, resulting in up to a 15-20 percent reduction in energy load.

- All exterior building signage and many refrigerated food cases will be illuminated with light emitting diodes (LEDs). In refrigerated food cases, LEDs perform well in the cold and produce less heat than fluorescent bulbs – heat which must be compensated for by the refrigeration equipment. LEDs also contain no mercury or lead.

  – LED technology is up to 52 percent more energy efficient than fluorescent lights.

  – Total estimated energy savings for LED lighting in the store's grocery section is approximately 59,000 kWh per year, enough energy to power five single family homes.

Day lighting

- The store will include a daylight harvesting system, which incorporates more efficient lighting, electronic continuous dimming ballasts, skylights and computer controlled daylight sensors that monitor the amount of natural light available. During periods of higher natural daylight, the system dims or turns off the store lights if they are not needed, thereby reducing energy usage. This program will help the store save a substantial amount of energy. Dimming and turning off building lights also helps eliminate unnecessary heat in the building.

- Daylight harvesting can reduce up to 75 percent of the electric lighting energy used in a Walmart store during daylight hours. Each system can save up to an average of 800,000 kWh annually, enough energy to power 73 single family homes (11,020 kWh average annual use.) for an entire year.

Central Energy Management System

Walmart employs a centralized energy management system (EMS) to monitor and control the heating, air conditioning, refrigeration and lighting systems for all stores from Walmart's corporate headquarters in Bentonville, Arkansas. The EMS enables Walmart to constantly monitor and control the expanded store's energy usage, analyze refrigeration temperatures, observe HVAC and lighting performance, and adjust system levels from a central location 24 hours per day, seven days per week. Energy usage for the entire store will be monitored and controlled in this manner.

HVAC

- The store will employ one of the industry's most efficient HVAC units available.

Dehumidification

- The building will include a dehumidifying system that allows Walmart to operate the store at a higher temperature, use less energy, and allow the refrigeration system to operate more efficiently.

White Roofs

- The store will feature a white membrane roof instead of the typical darker colored roof materials employed in commercial construction. The white membrane roof's higher reflectivity helps reduce building energy consumption and reduces the heat island effect, as compared to buildings utilizing darker roofing colors.

Refrigeration

- Walmart uses non ozone-depleting refrigerants. It uses R404a for the refrigeration equipment. For air conditioning, Walmart has converted to R410a refrigerant.

- Refrigeration equipment will be roof-mounted close to the refrigerated cases. This reduces the amount of copper refrigerant piping, insulation, potential for leaks and refrigerant charge needed.

Heat Reclamation

- The Walmart store will reclaim waste heat from on-site refrigeration equipment to supply approximately 70 percent of the hot water needs for the store.

It should also be noted that a substantial portion of the solid waste generated by Walmart and the other project users would be recycled by a local service provider. In addition, Walmart would enter private contracts for pickup of used cardboard and waste oil. The recycling and reuse of these materials would save substantial energy inputs required to produce goods from virgin materials.

In addition, with the passage of AB 32 (California Climate Act of 2006),[66] it is expected that greenhouse gas emission caps applicable to electrical generating stations will force a reduction in the use of fossil fuels for power generation, and their replacement with more renewable power sources.

Transportation Energy Use

As the proposed project involves several uses, it is expected that some vehicles visiting one of the different aspects of the expanded store will also be visiting one (or all) of the other uses. While the traffic study describes the project as resulting in 8,440 "new" vehicle trips daily to the store, these trips are not necessarily new but more likely rerouted trips which are currently consuming gasoline, as these trips are currently traveling to other sources of retail/grocery uses in the area, during one trip. In addition, the

66 California Health and Safety Code, Chapter 488, Division 25.5, Section 38500.

proposed project is not likely to produce an increase in population as would a residential development. Other than additional trucks to serve the expanded store, additional vehicles from an increased population is unlikely. In fact, implementation of the proposed project may result in a decrease in gasoline consumption from vehicles emissions due to the availability of retail and grocery shopping at one location. This potential reduction in trips could reduce the consumption of gasoline and therefore not result in a wasteful and unnecessary consumption of energy. The proposed project would not require additional energy capacity or the need for new energy systems or supplies.

Fuel consumption rates are expected to decline as older less fuel-efficient vehicles are retired, and as the new federal vehicle fuel-efficiency standards work to increase gas mileage through the vehicle fleet over time. There is also evidence that fuel consumption is declining due to fewer miles traveled in both California and the nation as a whole.[67] Another factor that would minimize wasteful and inefficient use of energy is the mix of commercial uses included in the project. For example, the presence of restaurants within the project will provide opportunities for employees and customers to stay on site for meals instead of traveling to off-site locations.

Transportation Energy Conservation

Due to their nature as automobile-oriented land uses, regional commercial centers do not readily lend themselves to the use of alternative transportation modes. As such, there is limited potential for reducing overall transportation energy consumption, or of specifically reducing use of fossil fuels in transportation, in conjunction with this project. However, the project would include opportunities for transit use with new bus stops to be constructed within the project site to facilitate convenient access to transit. Community bulletin boards within the larger stores such as Walmart would facilitate carpooling and vanpooling for employees, as well as include transit information and incentives.

The project would also install new sidewalks along Indiana Street, Springville Avenue, and Vandalia Avenue, with pedestrian linkages and dedicated pathways to be provided throughout the project. The project would also construct bicycle lanes along the project frontage. In addition, bicycle racks would be installed throughout the project. The transit, pedestrian, and bicycle facilities provided in conjunction with the project would help provide some reduction in overall vehicle miles traveled, particularly by employees, and thereby reduce consumption of transportation fuel by private vehicles.

While the availability of these alternatives will have some effect in reducing energy use associated with the project, the dominant transportation mode used by employees, customers and supplies will be petroleum-fueled vehicles. However, the general tightness of fuel supply, and resulting high fuel costs,

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67 California Energy Commission, *2003 Integrated Energy Policy Report*.

may have the beneficial effect of facilitating greater use of non-individual vehicle use, or more prudent travel patterns for vehicle use, and accelerated development and adoption of vehicles that are more fuel efficient or that rely on alternative fuel sources.

Conclusion

In summary, the operation of the project would result in the consumption of about 24.5 billion BTUs of electricity, and natural gas per year. Additional BTUs of gasoline would be consumed during both construction and operation of the proposed project. Although not accounted for in the above estimates, there are a number of energy conservation measures that will be incorporated into the design, construction, and operational aspects of the project, as discussed above, which would result in a considerable reduction in project energy consumption.

In conclusion, the project would not result in a significant impact to energy resources since it would result in the consumption of relatively small amounts of energy, compared to local consumption rates, in both the construction and operational phases, and because the energy conservation measures incorporated into the design and operation of the project would avoid wasteful, inefficient, or unnecessary consumption of energy.

Mitigation Measures

No specific mitigation measures.

Residual Impacts

Impacts would be less than significant.

Impact 5.14-3 **The proposed project would not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.** ***Less than significant impact.***

As detailed above, the Walmart portion of the project would consume approximately 430,257 kWh/month,[68] or 4,440,252 kWh/yr of electricity. The remaining 41,252 square feet associated with the outlot buildings would consume 536,276 kWh/yr based on the national average of 13 kWh/sf/year for commercial uses. Therefore, the total project electrical usage would total

68 CEI Engineering Associates, Inc., Barry Lindner, PE. July 2009.

4,976,528 kWh/yr which is equivalent to approximately 17 billion BTUs per year.[69] This represents approximately 0.0013 percent of Tulare County's total electrical consumption in 2007 of 3,781 million kWh.[70]

As detailed above, the Walmart portion of the project would consume approximately 2,997 thm/month,[71] or 30,924 thm/yr of natural gas. The remaining 41,252 square feet associated with the outlot buildings would consume 15,263 thm/yr based on the national average of 0.37 thm/sf/yr for commercial uses. Therefore, the total project natural gas usage would total 46,187 thm/yr, which is equivalent to approximately 4.6 billion BTUs per year.[72] This represents approximately 0.0003 percent of Tulare County's total natural gas consumption in 2007 of 145,876,373 thm.[73]

The proposed project would result in a small incremental increase in the energy demands as compared to the total consumption within Tulare County. Therefore, no new or expanded sources of energy would be required to serve the proposed project. In addition, the proposed project would be served by existing transmission lines located within the project vicinity, which have adequate capacity to serve the proposed project and would not require new or expanded delivery systems to provide electricity or natural gas to the project site. Impacts would be less than significant.

Mitigation Measures

No specific mitigation measures.

Residual Impacts

Impacts would be less than significant.

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69 1 kWh = 3,413 BTU.

70 California Energy Commission, "Energy Consumption Data Management System," http://www.ecdms.energy.ca.gov/elecbycounty.asp.

71 CEI Engineering Associates, Inc., Barry Lindner, PE. July 2009.

72 1 Therm = 100,000 BTU.

73 California Energy Commission, "Energy Consumption Data Management System," http://www.ecdms.energy.ca.gov/gasbycounty.asp#results.

5.14.7 CUMULATIVE IMPACTS

Impact 5.14-3 **Buildout of the City of Porterville 2030 General Plan would increase the energy demand in the City.** ***Less than significant impact.***

The development of the proposed project as well as other communities and business in the City of Porterville and surrounding region would depend upon the regional suppliers of energy in the future. The demand for energy at the completion of the proposed project would not by itself trigger the need for new electrical or natural gas generation facilities as it represents less than 0.2 percent of Tulare County's total energy consumption in 2007.

Buildout of the proposed project would be consistent with buildout of the General Plan, which would accommodate a projected population of 107,300 persons, each of who would require additional generation of electricity and natural gas. The City's *2030 General Plan EIR*[74] considered energy supplies to be sufficient through the planning horizon of 2030. With implementation of general plan policies impacts to energy resources were concluded to be less than significant. Cumulative impacts of the Riverwalk Marketplace II Project are consistent with these findings.

Cumulative Mitigation Measures

No mitigation measures required.

Residual Impacts

Impacts would be less than significant.

74 City of Porterville, *Draft Environmental Impact Report 2030 General Plan*, November 2007.