3.5 Energy Demand and Conservation

3.5.1 Introduction

This section provides information regarding the Proposed Project's energy demand and conservation. The information has been prepared in accordance with Public Resources Code section 21100, subdivision (b)(3), CEQA Guidelines section 15126.2, subdivision (b), and CEQA Appendix F. Section 15126.2 and CEQA Appendix F provide that an EIR should include an evaluation of a proposed project's potential energy implications and encourages measures to avoid or reduce the inefficient, wasteful, or unnecessary consumption of energy.

This section identifies and evaluates potential effects on energy resources in the form of electricity, natural gas, and transportation fuels that could result from implementation of the Proposed Project. The section contains: (1) a description of the existing energy infrastructure serving and energy consumption from the Project Site; (2) a description of changes under the Adjusted Baseline to establish baseline conditions; (3) a summary of the regulatory framework related to energy demand and conservation; and (4) an analysis of the potential impacts related energy demand associated with the implementation of the Proposed Project.

Comments received in response to the NOP for the EIR regarding energy demand and conservation can be found in Appendix B. Applicable issues and concerns regarding potential impacts related to energy demand and conservation as a result of implementation of the Proposed Project are analyzed within this section.

The analysis included in this section was developed based on project-specific construction and operational features described in Chapter 2, Project Description and Section 3.15, Utilities and Service Systems. The analysis also takes into account, and is consistent with, Section 3.7, Greenhouse Gas Emissions.

3.5.2 Environmental Setting

Regional Setting

Electricity

Electricity, as a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components for distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid.

Energy capacity, or electrical power, is generally measured in watts (W) while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 Wh. If ten 100 W bulbs were on for 1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a

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generator's capacity is typically rated in megawatts (MW), which is one million watts, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is one billion watt-hours.

Southern California Edison (SCE) provides electrical services to approximately 15 million people, 15 counties, 180 incorporated cities including the City of Inglewood and the Project Site, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area, across central, coastal and southern California, an area bounded by Mono County to the North, Ventura County to the West, San Bernardino County to the East, and Orange County to the South.¹ SCE produces and purchases energy from a mix of conventional and renewable generating sources.

SCE generates power from a variety of energy sources, including large hydropower (greater than 30 MW), coal, gas, nuclear sources, and renewable resources, such as wind, solar, small hydropower (less than 30 MW), and geothermal sources. In 2017, SCE's power system experienced a peak demand of 23,508 MW.^{2,3} Approximately 32 percent of SCE's 2017 electricity purchases were from renewable sources, which is similar to the 29 percent statewide percentage of electricity purchases from renewable sources.⁴ The annual electricity sale to customers in 2017 was approximately 85,879 million kilowatt hours (kWh).⁵

The closest SCE substation to the Project Site is located at 4128 West 103rd Street (Lennox Substation), and is the primary source of power to the existing uses on the Project Site. The substation provides two distribution service voltages: 16 kV and 4.8 kV. Overhead power lines service the existing uses and run from west to east along Century Boulevard and 102nd Street, and south to north along Prairie Avenue.

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs and delivered through high-pressure transmission pipelines. Natural gas provides almost one-third of the State's total energy requirements. Natural gas is measured in terms of cubic feet (cf).

The Project Site is served by the Southern California Gas Company (SoCalGas), which is the principal distributor of natural gas in Southern California, serving residential, commercial, and

¹ Southern California Edison, About Us > Who We Are, https://www.sce.com/about-us/who-we-are. Accessed March 2019.

² Southern California Edison, 2017 Annual Report, page 2, https://www.edison.com/content/dam/eix/documents/ investors/corporate-governance/2017-eix-sce-annual-report.pdf. Accessed March 2019.

³ California Energy Commission, Hydroelectric Power in California.

https://www.energy.ca.gov/hydroelectric/index.html. Accessed March 2019. California Energy Commission, Utility Annual Power Content Labels for 2017, Southern California Edison,

https://www.energy.ca.gov/pcl/labels/2017 labels/SCE 2017 PCL.pdf. Accessed March 2019.

Southern California Edison, 2017 Annual Report, page 2, https://www.edison.com/content/dam/eix/documents/ investors/corporate-governance/2017-eix-sce-annual-report.pdf. Accessed March 2019.

industrial markets. SoCalGas serves approximately 21.6 million customers in more than 500 communities encompassing approximately 20,000 square miles throughout central and southern California, from the City of Visalia to the US/Mexican border.⁶

SoCalGas, along with five other California utility providers, released the *2018 California Gas Report*, presenting a forecast of natural gas supplies and requirements for California through the year 2035. This report predicts gas demand for all sectors (residential, commercial, industrial, energy generation and wholesale exports) and presents best estimates, as well as scenarios for hot and cold years. Overall, SoCalGas predicts a decrease in natural gas demand in future years due to a decrease in per capita usage, energy efficiency policies, and the State's transition to renewable energy displacing fossil fuels including natural gas.⁷

SoCalGas receives gas supplies from several sedimentary basins in the western United States (US) and Canada, including supply basins located in New Mexico (San Juan Basin), west Texas (Permian Basin), the Rocky Mountains, and western Canada as well as local California supplies.⁸ Sources of natural gas in the southwestern US will continue to supply most of SoCalGas' natural gas demand. The Rocky Mountain supply is available but is used as an alternative supplementary supply source, and Canadian sources provide only a small share of SoCalGas supplies due to the high cost of transport.⁹ Gas supply available to SoCalGas from California sources averaged 323 million cf per day in 2017, the most recent year for which data are available.¹⁰

Existing gas lines in the vicinity of the Project Site extend west to east along Century Boulevard, 101st Street, and 102nd Street and from south to north along Prairie Avenue and Doty Avenue.

Transportation Energy

According to the California Energy Commission (CEC), transportation accounted for nearly 38.5 percent of total energy consumption in California during 2015.¹¹ In 2016, 15.5 billion gallons of gasoline and 3.8 billion gallons of diesel fuel were consumed in California.¹² Petroleum-based fuels currently account for more than 90 percent of California's transportation fuel use.¹³

 ⁶ SoCalGas, Company Profile, https://www.socalgas.com/about-us/company-profile. Accessed March 2019.
⁷ California Gas and Electric Utilities, 2018 California Gas Report, 2018, page 40, https://www.socalgas.com/
regulatory/documents/cgr/2018_California_Gas_Report.pdf. Accessed February 2019.

California Gas and Electric Utilities, 2018 California Gas Report, page 40.

California Gas and Electric Utilities, 2018 California Gas Report, page 40. California Gas and Electric Utilities, 2018 California Gas Report, page 40.

¹⁰ California Gas and Electric Utilities, 2018 California Gas Report, page 40.

California Gas and Electric Utilities, 2018 California Gas Report, page 32.
California Energy Commission, Final 2017 Integrated Energy Policy Report, page 3, https://efiling.energy.ca.gov/getdocument.aspx?tn=223205 . Accessed March 2019. Based on the transportation

sector accounting for 38.5 percent of the state's GHG emissions in 2015.
¹² California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2017, http://www.energy.ca.gov/almanac/transportation_data/gasoline/2016_A15_Results.xlsx. Accessed March 2019. Diesel is adjusted to account for retail (52%) and non-retail (48%) diesel sales.

¹³ California Energy Commission, 2016-2017 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program, May 2016, http://www.energy.ca.gov/2015publications/CEC-600-2015-014/CEC-600-2015-014-CMF.pdf. Accessed March 2019.

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The State is now working on developing flexible strategies to reduce petroleum use. Over the last decade, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and greenhouse gas emissions (GHGs) from the transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, gasoline consumption in California has declined. The CEC predicts that the demand for gasoline will continue to decline over the next 10 years, and there will be an increase in the use of alternative fuels.¹⁴ According to fuel sales data from the CEC, fuel consumption in Los Angeles County was approximately 3.66 billion gallons of gasoline and 0.59 billion gallons of diesel fuel in 2017.¹⁵

Project Site

All but six of the parcels (approximately 23 acres) that make up the Project Site are currently vacant or undeveloped. The six developed parcels, approximately 54,098 sf (1.24 acres) all within the Arena Site, include a <u>fast food</u> restaurant (on a privately-owned parcel), a hotel <u>motel(on a privately-owned parcel)</u>, warehouse and a light manufacturing/warehouse facilityies (on a privately-owned parcel), a warehouse, a commercial catering business, and a groundwater well and related facilities (on a City owned parcel). These uses actively consume electricity for lighting, electronics, appliances, and water conveyance. Natural gas is also used for cooking and heating/cooling. Transportation fuels are used for visitor, vendor, and worker trips to and from the existing land uses. The remaining, and majority, of the Project Site is undeveloped and does not consume energy or natural gas.

The existing energy use for the active uses within the Project Site are summarized in **Table 3.5-1**, *Estimated Existing Energy Consumption*. Detailed energy calculations are provided in Appendix D of this Draft EIR.

Table 3.5-1 Estimated Existing Energy Consumption					Comment [2]: Add rows for the other warehouse and commercial catering company.
Emissions Sources	Electricity (MWh)	Natural Gas (therms)	Gasoline (gallons)	Diesel (gallons)	
Existing					
Fast Food Restaurant	9,999	9,999	9,999	9,999	
Motel	999	999	999	999	
Manufacturing/Warehouse	999	999	999	999	Comment [3]: Currently vacant?
Water Well	999	999	999	999	·
Total	9,999	9.999	9,999	9,999	

Comment [1]: Some of these uses are vacant, so

do not actively consume electricity

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¹⁴ California Energy Commission, 2017 Integrated Energy Policy Report, page 213,

https://efiling.energy.ca.gov/getdocument.aspx?tn=223205. Accessed March 2019.

¹⁵ California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2017. Diesel is adjusted to account for retail (51%) and non-retail (49%) diesel sales.

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NOTES

^a Totals may not add up exactly due to rounding in the modeling calculations.

^b CO₂e emissions are calculated using the global warming potential values from the IPCC AR4.

SOURCE: ESA, 2019

3.5.3 Adjusted Baseline

As described in Chapter 3.0, Section 3.0.5, the analysis in this section assumes the Adjusted Baseline. Related to Energy-energy Demand-demand and Conservationconservation, the changes associated with the Hollywood Park Specific Plan Adjusted Baseline development include provision of energy infrastructure to serve the HPSP development (electricity lines and transformers, natural gas lines, etc.). These infrastructure improvements will be constructed and in operation at the time the Proposed Project commences operations. The HPSP Adjusted Baseline development includes the construction and operation of a 66/12 kV substation located within the HPSP area, on the east side of Prairie Avenue, approximately 470 feet south of the intersection with Arbor Vitae Street. The substation includes two 66/12 kV, 28 MVA¹⁶ transformers; four 66 kV circuit breakers; two 12 kV circuit breakers; 66 kV metering; and a mechanical-electrical equipment room. In addition to the substation, the HPSP Adjusted Baseline development includes (1) replacement of two 66 kV circuit breakers and one set of 66 kV line protection relays at Lennox Substation and one set of 66 kV line protection relays at Inglewood Substation; (2) looping of the existing underground Inglewood-Lennox 66 kV line into the Substation and the 298-acre HPSP site, creating a new underground Hollywood Park-Lennox 66 kV line and a Hollywood Park-Inglewood 66 kV line; (3) installation of two new 12 kV circuits, approximately 100 linear feet per circuit, from the substation to switch gear on the HPSP site.¹⁷ No other changes to the existing environmental setting related to energy demand and conservation would occur under the Adjusted Baseline.

3.5.4 Regulatory Setting

This section provides a summary of pertinent federal, State, and local energy laws, regulations, standards, and policies.

Federal

Energy Policy Act of 1992

The Energy Policy Act (EPAct) of 1992 was passed to reduce the US-s dependence on foreign petroleum and improve air quality. EPAct includes several parts provisions intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain Federal, State, and local governments and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition,

¹⁶ MVA – medium voltage ampere

¹⁷ California Public Utilities Commission, Advice Letter 3691-E, Notice of Proposed Construction Project Pursuant to General Order 131-D, Hollywood Park Substation Project, December 26, 2017.

Einancial incentives are also included in EPAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the EPAct to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 includes provisions for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a Federal purchase requirement for renewable energy.

Corporate Average Fuel Economy (CAFE) Standards

Established by the US Congress in 1975, the CAFE standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and United States Environmental Protection Agency (US EPA) jointly administer the Corporate Average Fuel EconomyCAFE standards. The US Congress has specified that Corporate Average Fuel EconomyCAFE standards must be set at the "maximum feasible level" with consideration given tofer: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.¹⁸

Fuel efficiency standards for medium- and heavy-duty trucks have been jointly developed by US EPA and NHTSA. The Phase 1 heavy-duty truck standards apply to combination tractors, heavyduty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018, and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type.¹⁹ US EPA and NHTSA have also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type.²⁰

U.S. Department of Transportation, U.S. Department of Energy, and $\underline{U.S.}$ Environmental Protection Agency on Transportation Energy

On the federal level, the U.S. Department of Transportation, U.S. Department of Energy, and US S. Environmenial Protection Agency (EPA) are three agencies with substantial influence over energy policies related to transportation fuels consumption. Generally, federal agencies influence transportation energy consumption through establishment and enforcement of fuel economy

¹⁸ For more information on the Corporate Average Fuel RomanyCAFE standards, refer to

https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy. Accessed March 2019.
¹⁹ United States Environmental Protection Agency (US-EPA), Fact Sheet: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles, August 2011, https://nepis.epa.gov/Exe/ZyPDF.cgi/P100BOT1.PDF?Dockey=P100BOT1.PDF. Accessed March 2019.

²⁰ US EPA, Federal Register/Vol. 81, No. 206/Tuesday, Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, October 25, 2016, https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed March 2019.

standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure projects.

State

California Public Utilities Commission

The California Public Utilities Commission® (CPUC) is a State agency created by a constitutional amendment to regulate privately_owned utilities providing telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation services, and in-State moving companies. The CPUC is responsible for assuring that California utility customers have safe, reliable utility services at reasonable rates, while protecting utility customers from fraud. The CPUC regulates the planning and approval for the physical construction of electric generation, transmission, or distribution facilities; and local distribution pipelines of natural gas.²¹

California Energy Commission

The California Energy Commission (CEC) is California's primary energy policy and planning agency. Created by the California Legislature in 1974, the CEC has five major responsibilities: 1) forecasting future energy needs and keeping historical energy data; 2) licensing thermal power plants 50 MW or larger; 3) promoting energy efficiency through appliance and building standards; 4) developing energy technologies and supporting renewable energy; and 5) planning for and directing State response to energy emergencies. Under the requirements of the California Public Resources Code, the CEC in conjunction with the California Department of Conservation (DOC) Division of Oil, Gas, and Geothermal Resources is required to assess electricity and natural gas resources on an annual basis or as necessary.²²

Senate Bill 1389

Senate Bill (SB) 1389 (PRC-Public Resources Code sections 25300–25323; SB-4389) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (PRC-Public Resources Code section 25301([a)]). The 2017 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California including energy efficiency, strategies related to data for improved decisions in the Existing Buildings Energy Efficiency Action Plan, building energy efficiency standards, the impact of drought on California's energy system, achieving 50 percent renewables by 2030, the California Energy Demand Forecast, the Natural Gas Outlook, the Transportation Energy Demand Forecast, Alternative and Renewable Fuel and Vehicle Technology Program benefits updates, update on

²¹ California Public Utilities Commissions, 2016. *California Public Utilities Commission*. Available: http://www.cpuc.ca.gov/. Accessed February 5, 2016.

²² California Energy Commissions, 2016. "About the California Energy Commission." Available: http://www.energy.ca.gov/commission/. Accessed February 5, 2016.

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electricity infrastructure in Southern California, an update on trends in California's sources of crude oil, an update on California's nuclear plants, and other energy issues.

California Global Warming Solutions Act of 2006

In 2006, Governor Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006 (codified in the California Health and Safety Code (HSC), Division 25.5), which focused on reducing GHG emissions in California to 1990 levels by 2020. Under HSC Division 25.5, California Air Resources Board (CARB) has the primary responsibility for reducing the State's greenhouse gas (GHG) emissions; however, AB 32 also tasked the CEC and the California Public Utilities Commission (CPUC) with providing information, analysis, and recommendations to CARB regarding strategies to reduce GHG emissions in the energy sector.

In 2016, Governor Brown signed SB 32 and its companion bill AB 197. SB 32 and AB 197 amend HSC Division 25.5 and establish a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and include provisions to ensure that the benefits of state climate policies reach into disadvantaged communities. Please see Section 3.7 of this Draft EIR, Greenhouse Gas Emissions, for additional details regarding these regulations.

Senate Bill (SB) 1078 (SB-1078, Sher) (Chapter 516, Statutes of 2002), and Senate BillSB 107 (SB-107, Simitian) (Chapter 464, Statutes of 2006), SB 100 (De León) (Chapter 312, Statutes of 2018) and Executive Order S-14-08

The State of California adopted standards to increase the percentage of electricity that retail sellers, including investor-owned utilities and community choice aggregators, must provide from renewable resources.³³ The standards are referred to as the Renewables Portfolio Standards (RPS) and require 33 percent by 2020 and 50 percent by 2030.

On September 10, 2018, Governor Jerry Brown signed SB 100, which further increased California's RPS and requires retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; and 60 percent by December 31, 2030; and that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045.

CPUC and the CEC jointly implement the RPS program. The CPUC's responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility's renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.²⁴ Refer to Section 3.7, Greenhouse Gas Emissions, of this Draft EIR for additional details regarding this regulation.

 ²³ SB 1078 (Chapter 526, Statutes of 2002); SB 107 (Chapter 464, Statutes of 2006); Executive Order S-14-08.
²⁴ California Public Utilities Commission, RPS Program Overview, 2018, http://www.cpuc.ca.gov/RPS_Overview/. Accessed March 2019.

California Building Standards Code (Title 24, Parts 6 and 11)

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The current California Building Energy Efficiency Standards (Title 24 standards) are the 2016 Title 24 standards, which became effective on January 1, 2017.²⁵ The 2016 Title 24 standards include efficiency improvements to the residential standards for attics, walls, water heating, and lighting; and efficiency improvements to the non-residential standards include alignment with the American Society of Heating and Air-Conditioning Engineers (ASHRAE) 90.1-2013 national standards.²⁶

The current Title 24, Part 6 standards (2016) were made effective on January 1, 2017. The next update to the Title 24 energy efficiency standards (2019 standards) go into effect on January 1, 2020.

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, <u>went-intobecane</u> effective on January 1, 2017. The 2016 CALGreen Code includes mandatory measures for non-residential development related to site development, energy efficiency, water efficiency and conservation; material conservation and resource efficiency, and environmental quality.²⁷ Most mandatory measure changes, when compared to the previously applicable 2013 CALGreen Code, were related to the definitions and to the clarification or addition of referenced manuals, handbooks, and standards. For example, several definitions related to energy that were added or revised affect <u>electric</u> <u>wehicle (EV)</u> chargers and charging, and hot water recirculation systems. For new multi-family dwelling units, the residential mandatory measures were revised to provide additional EV charging requirements, including quantity, location, size, single EV space, multiple EV spaces, and identification. For non-residential mandatory measures, Table 5.106.5.3.3 of the CALGreen Code, identifying the number of required EV charging spaces has been revised in its entirety. Refer to Section 3.7, *Greenhouse Gas Emissions*, of this Draft EIR for additional details regarding these standards.

California Assembly Bill (AB) 1493 (AB-4493, Pavley)

In response to the transportation sector accounting for more than half of California's carbon dioxide (CO₂) emissions, AB 1493 (commonly referred to as CARB's Pavley regulations), enacted on July 22, 2002, requires CARB to set GHG emission standards for new passenger vehicles, light duty trucks, and other vehicles manufactured in and after 2009 whose primary use

²⁵ California Energy Commission, 2016 Building Energy Efficiency Standards,

http://www.energy.ca.gov/title24/2016standards/. Accessed March 2019.

 ²⁶ California Energy Commission, 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, June 2015, http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf. Accessed December 26, 2018.

²⁷ California Building Standards Commission, Guide to the 2016 California Green Building Standards Code Nonresidential, January 2017, https://www.documents.dgs.ca.gov/bsc/CALGreen/CALGreen-Guide-2016-FINAL.pdf. Accessed March 2019.

is non-commercial personal transportation. Phase I of the legislation established standards for model years 2009–2016 and Phase II established standards for model years 2017-2025.^{28,29} Refer to Section 3.7, Greenhouse Gas Emissions, of this Draft EIR for additional details regarding this regulation.

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

In 2004, CARB adopted an Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling to reduce public exposure to diesel particulate matter emissions (Title 13 California Code of Regulations [CCR] Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

Low Carbon Fuel Standard

The Low Carbon Fuel Standard (LCFS), established in 2007 through Executive Order S-1-07 and administered by CARB, requires producers of petroleum-based fuels to reduce the carbon intensity of their products, starting with 0.25 percent in 2011 and culminating in a 10-percent total reduction in 2020. Petroleum importers, refiners and wholesalers can either develop their own low carbon fuel products, or buy LCFS credits from other companies that develop and sell low carbon alternative fuels, such as biofuels, electricity, natural gas, and hydrogen.

Regulation to Reduce Emissions of Diesel Particulate Matter, Nitrogen Oxides and other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles.

In addition to limiting exhaust from idling trucks, in 2008 CARB approved the Truck and Bus regulation to reduce NO_X , PM10, and PM2.5 emissions from existing diesel vehicles operating in California (13 CCR, Section 2025). The phased regulation aims to reduce emissions by requiring installation of diesel soot filters and encouraging the retirement, replacement, or retrofit of older engines with newer emission-controlled models. The phasing of this regulation has full implementation by 2023.

CARB also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower (hp) such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The In-Use Off-Road Diesel-Fueled Fleets regulation adopted by CARB on July 26, 2007 aims to reduce emissions by installation of diesel

²⁸ California Air Resources Board (CARB), Clean Car Standards—Pavley, Assembly Bill 1493,

http://www.arb.ca.gov/cc/ccms/ccms.htm, last reviewed January 11, 2017. Accessed March 2019.
US EPA, EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks, 2012, https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZ7C.PDF?Dockey=P100EZ7C.PDF. Accessed March 2019.

soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models (13 CCR Section 2449). The compliance schedule requires full implementation by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

While the goals of these measures are primarily to reduce public health impacts from diesel emissions, compliance with the regulation has shown an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines.³⁰

CARB's Advanced Clean Car Program

The Advanced Clean Cars emissions-control program was approved by CARB in 2012 and is closely associated with the Pavley regulations.³¹ The program requires a greater number of zeroemission vehicle models for years 2015 through 2025 to control smog, soot, and GHG emissions. This program includes the Low-Emissions Vehicle (LEV) regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles; and the Zero-Emissions Vehicle regulations (ZEV) to require manufactures to produce an increasing number of pure ZEV's (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025.

Sustainable Communities and Climate Protection Act of 2008 (SB 375)

Adopted by the State on September 30, 2008, the Sustainable Communities and Climate Protection Act of 2008, or SB 375, establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, each region's reduction target must be incorporated within that region's Regional Transportation Plan (RTP), which is used for long-term transportation planning in a Sustainable Communities Strategy (SCS). Certain transportation planning and programming activities must then be consistent with the SCS. However, SB 375 expressly provides that the SCS does not regulate local land use decisions, and further provides that local land use plans and policies (e.g., general plan) are not required to be consistent with either the RTP or the SCS. Refer to Section 3.7, Greenhouse Gas Emissions, of this Draft EIR for additional details regarding these requirements.

California Environmental Quality Act

Under CEQA, EIRs are required to include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the CEQA Guidelines provides a list of energy-related topics that should be analyzed in the EIR. In addition, Appendix F provides the following topics for consideration in the discussion of energy use in an EIR, to the extent the topics are applicable or relevant to the Proposed Project:

³⁰ Cummins, Inc., Cummins Tier-4-Final Field Test Showed 10% Lower Fuel Consumption, March 5, 2014,

https://cumminsengines.com/cummins-tier-4-final-field-test-program. Accessed March 2019.
³¹ CARB, Clean Car Standards – Pavley, Assembly Bill 1493, https://www.arb.ca.gov/cc/ccms/ccms.htm, last reviewed January 11, 2017. Accessed March 2019.

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

Regional

Southern California Association of Governments

The Project Site is located within the planning jurisdiction of the Southern California Association of Governments (SCAG), as is all of Inglewood and Los Angeles, among other jurisdictions. SCAG's first-ever SCS was included in the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (2012 RTP/SCS), which was adopted by SCAG in April 2012. The goals and policies of that SCS that reduced per capita VMT (and resulted in corresponding decreases in per capita transportation-related fuel consumption) focused on transportation and land use planning that included encouraging infill development, locating residents closer to where they work and play, and designing communities so there is access to high quality transit service.

SCAG has since adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS). The goals and policies of the 2016 RTP/SCS build from the previous 2012 RTP/SCS and provide strategies for reducing per capita VMT. These strategies include supporting projects that encourage diverse job opportunities for a variety of skills and levels of education, recreation, and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "Complete Streets" policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative-fueled vehicles. Please see Section 3.7, Greenhouse Gas Emissions, of this EIR for additional details regarding the 2016 RTP/SCS.

[Note to reviewer: Should the following discussion be kept here or be included in Analysis?] The Proposed Project would not be inconsistent with the strategies and principles of the 2016 RTP/SCS that are designed to reduce VMT and the GHG emissions associated with on-road vehicle travel. The Proposed Project would be infill development that provides a dense mix of

recreation and entertainment, office, retail, restaurant, community, and hotel uses, on parcels of infill urban land accessible to and served by public transit and near existing and planned housing. The Proposed Project has been designed with the complete communities concept in mind by integrating community design with land use planning and transportation planning, and by providing construction and permanent jobs for a variety of skills and education, recreational and cultural events, and a full-range of shopping, entertainment and services all within a relatively short distance.

The Proposed Project meets the HQTA criteria of being within one half mile of a fixed guideway transit stop or a bus transit corridor where buses pick up passengers at a frequency of every 15 minutes or less during peak commute hours. The Project Site is adjacent to two bus lines (the 117 and 212/312 lines, which stop at the intersection of West Century Boulevard and South Prairie Avenue) and within one half mile of a third bus route (the combined 740/40 Metro bus), which are corridors that pick up passengers at intervals of 15 minute or less during peak commute hours.

As described in Section 2.5.5 Circulation, the Proposed Project would include an Event Transportation Management Plan (TMP) designed to facilitate multi-modal travel to and from events at the Project Site in a safe and efficient manner during event days. In addition, the Proposed Project will implement a Transportation Demand Management (TDM) program designed to reduce vehicle trips by attendees, employees, visitors, and customers through the use of alternate modes of transportation including transit, shuttles, ridesharing, walking, and biking.

The Proposed Project's consistency with the 2016-2040 RTP/SCS is evaluated in more detail in Section 3.7.4, Analysis, Impacts and Mitigation.

Local

City of Inglewood General Plan

The City of Inglewood General Plan sets forth goals, objectives, and policies for the future development of the City and designates the location of desired future land uses within the City. The latest adoptions of the individual elements of the City of Inglewood General Plan are as follows: Land Use Element, adopted September 14, 2016; Housing Element 2013-2021, adopted January 28, 2014; Conservation Element, adopted October 21, 1997; Open Space Element, adopted December 1995; Safety Element, adopted July 1995; Circulation Element, adopted December 15, 1992; and Noise Element, adopted September 1, 1987.

There are no goals and policies in the General Plan that directly address energy demand and conservation. However, the following goals from the Land Use Element of the City of Inglewood General Plan are relevant to transportation-related energy demand and conservation.³²

³² City of Inglewood, Department of Community Development and Housing, 1980. Land Use Element of the Inglewood General Plan. January 1980. Amended September 14, 2016.

Circulation Goals:

- Promote and support adequate public transportation within the City and the region.
- Develop a safe and adequate pedestrian circulation system which is barrier free for the handicapped.

[Note to reviewer: Should the following discussion be kept here or be included in Analysis?] As described in Chapter 2, Project Description, the Proposed Project would be a large-scale development integrating commercial, office, entertainment uses that would promote pedestrian uses and supports public transportation. The Proposed Project would include provisions that would promote the use of public transportation as a means of travel to and from the Proposed Arena, including a Transportation Hub at the East Parking Garage site, shuttle stops on Prairie Avenue, and a shuttle system for large events that would connect the Proposed Project to nearby Metro stations. In addition, improvements to the sidewalks fronting the Project Site and a pedestrian bridge crossing Prairie Avenue would promote a safe pedestrian circulation system that would meet ADA requirements. For these reasons, the Proposed Project would not be inconsistent with the General Plan Land Use Element goals listed above. Ultimately, it is within the authority of the City Council to determine if the Proposed Project is consistent with the City of Inglewood General Plan.

Please see further discussion of transit and pedestrian circulation in Section 3.14, Transportation and Circulation, Impact 3.14-X.

City of Inglewood Climate Action Plan

The 2013 Inglewood Energy and Climate Action Plan (ECAP) presents the City's community and municipal inventories, emissions forecasts, and recommended reduction targets for emissions to mitigate the Citv's impacts on climate change.³³ The ECAP includes a business-as-usual (BAU) forecast that estimates future emissions in 2020 and 2035 from six sectors: commercial and municipal; industrial; residential; transportation; solid waste; and water. The BAU forecast assumes a future under regulatory conditions as they existed in 2010, and it does not include the effects of updates to Title 24, the Renewables Portfolio Standard, and the Pavley Clean Car Standards on future GHG emissions. The City's emission reduction targets are 15 percent below 2005 levels by 2020 and 32.5 percent below 2005 levels by 2035. State-level actions, such as the Pavley Clean Cars legislation, the Low Carbon Fuel Standard, the Renewables Portfolio Standard, and Title 24 upgrades are expected to reduce community emissions by 121,139 metric tons of carbon dioxide equivalent (MT CO2e) per year by 2020, and 160,002 by year 2035. Local measures in the ECAP are expected to reduce community emissions an additional 9,803 MT CO2e per year by 2020, and 10,994 MT CO2e per year by year 2035. The GHG emissions reductions realized by State and local measures would be a direct result of energy efficiency upgrades aimed at increasing building energy performance, promoting renewable energy, and

Comment [4]: The pedestrian circulation system discussion doesn't seem very relevant to energy demand and conservation.

Comment [5]: Same comment re: relevancy of pedestrian circulation discussion.

³³ City of Inglewood, 2013, Inglewood Energy and Climate Action Plan. Available: https://www.cityofinglewood.org/225/Sustainability. Accessed: Feb 15, 2019. March 2013.

increasing vehicle fuel economy. The ECAP includes energy reductions from the following implementing strategies and actions:

Strategy 1 - Lead by Example with Municipal Government Actions

- Continue Building and Facility Energy Upgrades to reduce energy use
- Replace all City-owned street, park, and traffic lights with LED lights
- Accelerate city vehicle fleet replacement

Strategy 2: Increase Energy Efficiency

- Make commercial buildings more efficient
- Increase the energy efficiency of residential buildings
- Increase the energy efficiency of street and traffic lights.

Strategy 3: Support Renewable Energy Generation

- Remove barriers to renewable energy generation
- Make renewable energy generation more affordable
- Educate potential customers

Strategy 4: Improve Transportation Options and Manage Transportation Demand

- Make roadways more efficient
- Improve transit
- Improve bicycle facilities
- Make parking more efficient
- Reduce commute trips
- Encourage land use intensification and diversity

Strategy 5: Reduce Consumption and Waste

- Use less water
- Produce less water
- Promote local food production

The ECAP strategies and local actions support reducing energy consumption. The majority of the ECAP's actions are aspirational or non-prescriptive, and do not commit the City of Inglewood nor its residents and businesses to specific actions.

[Note to reviewer: Should the following discussion be kept here or be included in Analysis?] The Proposed Project would be designed and constructed to reduce energy, water and other resources by meeting the US Green Building Council's Leadership in Energy and Environmental Design (LEED) Gold certification requirements, and would provide a dense mix of recreation, entertainment, office, retail, restaurant, community, and hotel uses on parcels of infill urban land accessible to and served by public transit and near existing and planned housing. In addition, the Proposed Project would implement a TDM program designed to reduce vehicle trips by attendees,

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employees, visitors, and customers through the use of alternate modes of transportation including transit, shuttles, ridesharing, walking, and biking.

As such, the Proposed Project would not be inconsistent with the ECAP. Conversely, the Proposed Project would directly support implementation of the following ECAP actions:

- Make commercial buildings more energy efficient,
- Improve transit,
- Improve bicycle facilities,
- Reduce commute trips,
- Encourage land use intensification and diversity,
- Use less water, and
- Produce less waste.

3.5.5 Analysis, Impacts and Mitigation

Significance Criteria

The City has not adopted thresholds of significance for analysis of impacts to energy. The following thresholds of significance have been adapted from CEQA Guidelines section 15065 and CEQA Guidelines Appendix G. These thresholds are also based on Public Resources Code section 21100, subdivision (b)(3), CEQA Guidelines section 15126.2, subdivision (b), and CEQA Guidelines Appendix F. A significant impact would occur if the Proposed Project would:

- 1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation; or
- 2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.