3. Environmental Setting, Impacts, and Mitigation Measures [STYLEREF "Heading 3" \n][STYLEREF "Heading 3"]

3.5 Energy Demand and Conservation

3.5.1 Introduction

This section provides information regarding the energy demand and conservation that would result from approval and implementation of the Proposed Project. The information has been prepared in accordance with Public Resources Code (PRC) section 21100(b)(3), CEQA Guidelines section 15126.2(b), and Appendix F of the CEQA Guidelines. Section 15126.2 and Appendix F provide that an EIR should include an evaluation of a proposed project's potential impacts as a result of the demand for energy during construction and operational phases of the Proposed Project, and encourage 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 to the Environmental Setting 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 to energy demand associated with the construction and operation 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, and Section 3.14, Transportation and Circulation.

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 $(W)_2$ 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 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 2018 was approximately 87,143,000 megawatt hours (MWh).⁵ See **Table 3.5-1**, Existing Annual Energy Use, for a summary of SCE's 2018 electricity use.

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 West Century Boulevard and West 102rd Street, and south to north along South Prairie Avenue.

Southern California Edison, About Us >Who We Are, https://www.sce.com/about-us/who-we-are. Accessed April 25, 2019.

² Southern California Edison, 2018 Annual Report, p. 2, https://www.edison.com/content/dam/eix/documents/ investors/corporate-governance/eix-sce-2018-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.

 ⁴ 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. 5 Southern California Edison, 2017 Annual Report, p. 2, https://www.edison.com/content/dam/eix/documents/

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

TABLE 3.5-1 EXISTING ANNUAL REGIONAL ENERGY USE

Source	Amount	
Electricity (SCE) a	87,143,000 MWh	
Natural Gas (SoCalGas) ^b	988,785,000 MMBtu	
Gasoline (Statewide) °	3,659,000,000 gallons	
Diesel (Statewide) °	590,196,078 gallons	

^b California Gas and Electric Utilities, 2018 California Gas Report, p. 102.

° California Energy Commission, 2017. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results

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 both cubic feet (cf) or British thermal units (Btu).

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 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

SoCalGas, Company Profile, https://www.socalgas.com/about-us/company-profile. Accessed March 2019. California Gas and Electric Utilities, 2018 California Gas Report, 2018, p. 40, https://www.socalgas.com/

regulatory/documents/cgr/2018 California Gas Report.pdf. Accessed February 2019.

⁸ California Gas and Electric Utilities, 2018 California Gas Report, p. 40.

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 2,625 million cf per day or 2,717 million Btu (MMBtu) in 2017, the most recent year for which data are available.¹⁰ This equates to an annual average of 892,060 million cf per year or 992 million MMBtu per year. See Table 3.5-1 for a summary of SoCalGas' 2018 natural gas use.

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

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 See Table 3.5-1 for a summary of Statewide fossil fuel consumption in 2017.

Project Site

The Project Site is comprised of approximately 28 acres of land. All but six of the parcels that make up the Project Site are currently vacant. The vacant parcels within the Project Site total

⁹ California Gas and Electric Utilities, 2018 California Gas Report, p. 40.

California Gas and Electric Utilities, 2018 California Gas Report, p. 102.
 California Farray Commission Einel 2017 Integrated Energy Policy Rep.

¹¹ California Energy Commission, Final 2017 Integrated Energy Policy Report, p. 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, 2017. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 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.

¹⁴ California Energy Commission, 2017 Integrated Energy Policy Report, p. 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.

approximately 23 acres, or more than 85 percent of the Project Site. The six developed parcels, approximately 2.9 acres all within the Arena Site, include a <u>fast food</u> restaurant, a <u>hotelmotel</u>, warehouse and light manufacturing facilities, a commercial catering business, and a groundwater well and related facilities <u>iPlease make sure all of this conforms to current Project</u> <u>Description draft (see Table 2-1 in Chapter 2, Project Description).</u>

All of these uses, besides the currently unoccupied light manufacturing/warehouse facility <u>(same)</u>, actively consume electricity for lighting, electronics, appliances, and water conveyance. Natural gas is also used for cooking, hot water heating, and building heating/cooling at the four of the five active land uses (the well and related facilities do not use natural gas), and transportation fuels are used for visitor, vendor, and worker trips to and from the existing active land uses. The remaining, and majority, of the Project Site is undeveloped and does not consume energy or natural gas.

The existing energy consumption for the active uses within the Project Site are summarized in **Table 3.5-2**, Estimated Existing Energy Consumption. Detailed energy calculations are provided in Appendix G of this Draft EIR.

Emissions Sources	Electricity (MWh)	Natural Gas (MMBtu)	Gasoline (gallons)	Diesel (gallons)
Existing - Onsite				
Commercial (Fast Food Restaurant)	43.3	289.9		8,098
Commercial (HotelMotel)	173.1	575.6		
Warehouse	247.3	602.1	01 7000	
Light Manufacturing/Warehouse	25.9	24.5	81,722°	
Commercial (Catering)	16.0	10.4		
Natural Gas-Powered Vehicles	-	98.7		
Subtotal ^d		[=SUM(ABOVE) \# "#,##0.0"]	81,722	8,098
Existing – LA Clippers Facilities (Offsite)				
LA Clippers Team Office	262.6	206.74	04.070	9,341
LA Clippers Training Center	475.4	772.69	94,270	
Natural Gas-Powered Vehicles	-	78.3	-	-
Subtotal	[=SUM(ABOVE) \# "#,##0.0"]	1,058	[=SUM(ABOV E)]	[=SUM(ABOV E)]
Total	1,244	2,659	175,992	17,439

TABLE 3.5-2 ESTIMATED EXISTING ENERGY CONSUMPTION^{a,b}

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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
- Existing onsite fossil fuel consumption is calculated as a total for all onsite existing land uses
 Energy consumption from the proposed well would be less than under existing conditions.
- a Energy consumption from the proposed well would be less than under existing conditions

SOURCES:

- ¹ CalEEMod (v. 2016.3.2) annual outputs and default emission factors were used to calculate building energy for all land uses (electricity and natural gas). http://www.caleemod.com/.
- ² EMFAC2017 emission factors were used to calculate fossil fuel and natural gas usage from all mobile sources https://www.arb.ca.gov/emfac/2017/.

Existing Uses Relocating to Project Site

In addition to the sectoral-LA Clippers <u>NBA</u> games being relocated to the Project Site, the <u>uses at</u> <u>the</u> existing LA Clippers Team Offices, which are currently located at 1212 South Flower Street, Los Angeles, California, and the existing LA Clippers <u>practice</u> and <u>athletic</u> training center <u>[Flease</u> <u>make sure this language all conforms to Project Description terminology.]</u>, which is located in Playa Vista, at 6854 South Centinela Avenue in Los Angeles, California, would be relocated to the Project Site upon completion of construction. See "Existing – LA Clippers Facilities (Offsite)" in Table 3.5-1, above.

3.5.3 Adjusted Baseline Environmental Setting

As described in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, the analysis in this section assumes the Adjusted Baseline. Related to energy demand and conservation, the changes associated with the Hollywood Park Specific Plan (HPSP) Adjusted Baseline project include provision of energy infrastructure to serve the HPSP Adjusted Baseline project (electric vehicle (EV) charging stations, 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. For purposes of this analysis, the infrastructure improvements included in the Adjusted Baseline would not affect the threshold₃ of significance or the impact <u>soulypis</u> <u>analyses</u> related to energy demand and conservation for the Proposed Project. 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 US dependence on foreign petroleum and improve air quality. EPAct includes several provisions intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan

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areas. EPAct requires certain Federal, State, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. Financial 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 CAFE standards. The US Congress has specified that CAFE standards must be set at the "maximum feasible level" with consideration given to: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.¹⁶

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.¹⁷ 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.¹⁸

US Department of Transportation, US Department of Energy, and US Environmental Protection Agency <u>influence</u> on Transportation Energy

On the federal level, the US Department of Transportation, US Department of Energy, and US 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 standards for automobiles and light

¹⁶ For more information on the CAFE standards, refer to https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy. Accessed March 2019.
¹⁷ Used States Feature Protocol and States Feature Protocol and

¹⁷ United States Environmental Protection Agency, 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.

¹⁸ United States Environmental Protection Agency, 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.

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.¹⁹

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.

Senate Bill 1389

Senate Bill (SB) 1389 (PRC sections 25300–25323) 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 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, an update on electricity infrastructure in Southern California's nuclear plants, and other energy issues.

¹⁹ California Public Utilities Commission, 2019. California Public Utilities Commission. Available: http://www.cpuc.ca.gov/. Accessed April 25, 2019.

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 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, Greenhouse Gas Emissions, of this Draft EIR, for additional details regarding these statutes.

Senate Bill (SB) 1078 (Sher) (Chapter 516, Statutes of 2002), 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.²⁰ The standards are referred to as the Renewables Portfolio Standards (RPS). The legislation requires utilities to increase the percentage of electricity obtained from renewable sources to 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. SB 100 also provides 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.²¹ Refer to Section 3.7, Greenhouse Gas Emissions, of this Draft EIR for additional details regarding this program.

SB 1078 (Chapter 526, Statutes of 2002); SB 107 (Chapter 464, Statutes of 2006); Executive Order S-14-08.
 California Public Utilities Commission, RPS Program Overview, http://www.cpuc.ca.gov/RPS_Overview/. Accessed April 25, 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 [CCR], 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, 2017.²² 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.²³

The next update to the Title 24 energy efficiency standards (2019 standards) goes into effect on January 1, 2020.

The California Green Building Standards Code (CCR, Title 24, Part 11), commonly referred to as the CALGreen Code, became 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.²⁴ 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 electric vehicle (EV) 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.

A discussion of the consistency of the Proposed Project with the requirements of the CALGreen Code and Title 24 is provided under Impact 3.5-2, below.

California Assembly Bill (AB) 1493 (Pavley)

The transportation sector accounts 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

²² California Energy Commission, 2016 Building Energy Efficiency Standards, http://www.energy.ca.gov/title24/ 2016standards/. Accessed March 2019.

²³ 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.

²⁴ California Building Standards Commission, 2017. 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.

trucks, and other vehicles manufactured in and after 2009 whose primary use 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.^{25,26} Refer to Section 3.7, Greenhouse Gas Emissions, of this Draft EIR for additional details regarding this regulation.

California Assembly Bill (AB) 341

Assembly Bill 341 was approved in October 2011 and requires that integrated waste management plans set a policy goal <u>of reducing that</u> not less than 75% of solid waste is diverted from landfill disposal by 2020. The AB <u>341</u> also requires that any business that generates more than 4 cubic yards of commercial solid waste per week to arrange for recycling services.

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 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 prohibits diesel-fueled commercial vehicles from idling 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.

Airborne Toxic Control Measure to for Stationary Compression Ignition (CI) Engines

In 2004, CARB adopted an Airborne Toxic Control Measure to reduce public exposure to diesel particulate matter emissions and criteria pollutant emissions from stationary diesel-fueled compression ignition (CI) engines (Title 17 CCR Section 93115). The measure applies to any person who owns or operates a stationary CI engine in California with a rated brake horsepower greater than 50, or anyone who either sells, offers for sale, leases, or purchases a stationary CI engine. This measure outlines fuel and fuel additive requirements; emission standards; recordkeeping, reporting and monitoring requirements; and compliance schedules for CI engines.

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

²⁵ California Air Resources Board, Clean Car Standards—Pavley, Assembly Bill 1493,

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

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 Air 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 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.²⁷

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.²⁸ The program requires a greater number of zero-emission 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 air 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

²⁷ 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.

²⁸ California Air Resources Board, Clean Car Standards – Pavley, Assembly Bill 1493, https://www.arb.ca.gov/cc/ ccms/ccms.htm, last reviewed January 11, 2017. Accessed March 2019.

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 (PRC section 21100(b)(3)), 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. If the analysis of a proposed project shows that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, then the EIR must identify mitigation measures to address that energy use. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project. (CEQA Guidelines section 15126.2(b).) 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:

- 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

As described in Section 3.10, Land Use, the 2016–2040 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals, with a specific goal of achieving an 8 percent reduction in passenger vehicle GHG emissions on a per capita basis by 2020, 18 percent reduction by 2035, and 21 percent reduction by 2040 compared to the 2005 level. Although the RTP/SCS is not technically an energy efficiency plan, consistency with the RTP/SCS has energy implications, including the reduction of VMT which reduces GHG emissions and has the co-benefit of reducing fossil fuel consumption from travel to and from the Project Site.

Consistency of the Proposed Project with the 2016–2040 RTP/SCS, including Goal-7the per capita passenger vehicle emissions goals, is discussed under Impact 3.5-2, below.

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.

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.²⁹

Circulation Goal: Promote and support adequate public transportation within the City and the region.

Circulation Goal: Develop a safe and adequate pedestrian circulation system which is barrier free for the handicapped.

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

City of Inglewood Climate Action Plan

The 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 City's impacts on climate change.³⁰

The ECAP includes a business-as-usual (BAU) forecast that estimates future emissions in 2020 and 2035 from six sectors: Transportation, Residential Energy, Commercial/Municipal Energy,

²⁹ City of Inglewood, Department of Community Development and Housing, 1980. Land Use Element of the Inglewood General Plan. January 1980. Amended September 14, 2016.

³⁰ City of Inglewood, 2013. Inglewood Energy and Climate Action Plan. Available: https://www.cityofinglewood.org/225/Sustainability. Accessed February 15, 2019. March 2013.

Industrial Energy, 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. Under the BAU forecast, Inglewood's total GHG emissions are expected to increase approximately 14 percent from 2010 (594,273 MTCO₂e) to 2035 (678,283 MTCO₂e). On a perservice population (SP)³¹ basis, the increase is shown to be 4.5 percent, from 4.22 MTCO₂e/SP in 2010 to 4.41 MTCO₂e/SP in 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 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
- Continue commute trip reduction program
- Planning for electric vehicle infrastructure

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

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³¹ Service population = residents plus employees working within the City limits.

3. Environmental Setting, Impacts, and Mitigation Measures [STYLEREF "Heading 3" \ln] [STYLEREF "Heading 3"]

• 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. A discussion of the consistency of the Proposed Project with the ECAP is provided under Impact 3.5-2, below.

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 PRC section 21100(b)(3), CEQA Guidelines section 15126.2(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.

Methodology and Assumptions

The discussion below presents the methodology used to analyze the Proposed Project's potential energy usage, including electricity, natural gas, and transportation fuels during construction and operational phases. Specific assumptions and data sources needed to quantify energy consumption during both construction and operation are presented. The methods used for the energy calculations (see Appendix G of this Draft EIR) are the same as those used for the GHG calculations, as discussed in Section 3.7, Greenhouse Gas Emissions, of this Draft EIR.

Baseline Conditions

Baseline annual energy consumption includes the operational energy use associated with, and vehicle trips to and from. LA Clippers games at the Staples Center, LA Clippers' team business operations at the existing team offices, on-site the existing practice and athletic training facilities, market-shifted non-NBA events, the existing on-site structures that would be removed and replaced with construction of the Proposed Project, and vehicle trips to and from the on-site uses. This energy use is currently occurring, and is therefore part of the existing environmental setting.

The analysis assumes that an annual average of 5 pre-season, 41 regular season, and 3 postseason LA Clippers home <u>NBA</u> games would be hosted at the areasare played at the Staples Center. The annual average number of post-season games was based on the average number of post-season home games per NBA team per year. These 49 LA Clippers home games are considered part of

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the Proposed Project baseline conditions. These games currently occur at Staples Center and tThe energy use associated with these games <u>currently occurring at the Staples Center</u> is considered part of the existing environmental setting.

The baseline conditions analysis assumes that a portion of the non-NBA game events (e.g., concerts, family shows, non-NBA sports games or other events) anticipated to occur at the Proposed Project would be new events that would not otherwise occur in the Los Angeles region, and the remaining portion of non-NBA game events would have otherwise occurred at other venues in the Los Angeles region, but would be <u>relocated</u>shifted through market forces to the Project Site; these latter events are referred to as market-shifted events. The market-shifted events are considered part of the Adjusted Baseline conditions of the Proposed Project. <u>even though they have a marginal increase in fiel consumption due to their new location at the Project Site.</u> Since these events are already occurring in the Los Angeles area and, as such, the energy use associated with these events is part of the existing environmental setting.³² See Table 3.7-4 in Section 3.7, Greenhouse Gas Emissions, for a detailed account of the anticipated annual events at the Project Site and the number of market shifted events per event type.

The Proposed Project would include relocation of the existing LA Clippers team offices, which are located in downtown Los Angeles, at 1212 South Flower Street, and the existing LA Clippers practice and athletic training conterfacility, which is located in the Playa Vista neighborhood of Los Angeles, at 6854 South Centinela Avenue. [Please make sure this conforms to current version of Project Description.] Energy use at the existing team offices and practice and athletic training facilityies isage currently occurring, and are is therefore as a solubly part of the existing environmental setting. The energy use at the existing team offices and practice and athletic training facilityies are is not, however, included in the "baseline" energy use. Although these uses would be relocated to the Project Site upon completion of construction, it is likely that these facilities would be backfilled with new tenants once they are vacated by the LA Clippers. This is particularly true of the current LA Clippers team offices in downtown Los Angeles, located in a multi-tenant office building where demand for commercial real estate is relatively high. For the LA Clippers' practice and athletic training conterfacility, it would be speculative to assume the type of use the that could occupy it in the future, given its unique use, design and space allocation, but for the purposes of this analysis it is assumed that a new tenant would backfill it with a similar emissions profile. Thus, the existing energy from operations of both the team offices and the training center were not considered part of the baseline conditions against which the Proposed Project's energy use was measured.

Development of the Proposed Project would first require the demolition and removal of existing uses buildings on at six of the propostion parcels located within the Project Site. Several of these parcels are currently developed with existing on site uses. Existing buildings within the Project

³² The estimate of the number of events that is new to the market, as opposed to market-shifted events, is based on an analysis of the Los Angles market for events hosted at arenas, based on information regarding the number and growth of events at Staples Center and The Forum. Stone Planning, 2019. Inglewood Basketball and Entertainment Center – Analysis of Future Events. June 2019.

Site include a 16,806 sf motel; an 1,118 sf fast food restaurant; a 28,809 sf light industrial inamifacturing/warshouse building; an 1,134 sf commercial building; and a 6,321 sf light industrial manufacturing/warshouse building; an 1,134 sf commercial building; and a 6,321 sf light industrial warshouse. <u>IConform to Project Description by using all of the exact</u> nomenciature used there, adding existing well and associated facilities, and indicating which of the two light industrial buildings is currently vacant.] Refer to Section 3.7, Greenhouse Gas Emissions, for more information regarding baseline conditions and assumptions.

Construction

The existing uses on the Project Sites would be demolished and removed to allow for development of the Proposed Project. See Chapter 2, Project Description, for a detailed account discussion of the existing land uses that would be demolished as part of the Proposed Project.

Construction energy consumption would result from transportation fuels (e.g., diesel and gasoline) used for haul trucks, heavy-duty construction equipment, construction workers traveling to and from the Project Site, electricity consumed to <u>hight-and-coolpower</u> the construction trailers (<u>lights, electronic equipment</u>, and heating and cooling) and exterior uses such as lights, conveyance of water for dust control, and any electrically-driven construction equipment. Natural gas would be used for CNG powered off-mad vehicles.

Construction activities could vary substantially from day to day, depending on the specific type of construction activity and the number of workers and vendors that would travel to the Project Site. This analysis considered these factors and provides the estimated maximum construction energy consumption for the purposes of evaluating the associated impacts on energy resources.

Construction fuel use was forecasted by assuming a conservative estimate of construction activities and applying mobile source emissions factors. Construction of the Proposed Project would occur over approximately 40 months, from July 2021 through October 2024 (i.e., assuming all construction occurs at the earliest feasible date) and mobile source emissions factors were applied. If, for various site planning, financial, or other reasons, the onset of construction is delayed to a later date than assumed in the analysis, construction impacts would be similar to or less than those analyzed, because more energy-efficient and cleaner burning construction equipment and vehicle fleet mix would be expected in the future. This is due to the In-Use Off-Road Diesel-Fueled Fleets Regulation implemented by CARB that requires construction equipment fleet operators to phase- in less polluting heavy-duty equipment and trucks over time.³³

Electricity

Construction electricity use was estimated for a temporary construction office, for construction equipment that would use electricity as an alternative to diesel fuel, and for water usage from dust control activities. The CalEEMod emissions model, described further in Section 3.7, Greenhouse

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³³ California Air Resources Board, In-Use Off-Road Diesel-Fueled Fleets Regulation, Revised October 2016. https://www.arb.ca.gov/msprog/ordiesel/faq/overview_fact_sheet_dec_2010-final.pdf.

Gas Emissions, was used to estimate project emissions of criteria air pollutants and GHGs, and was also used to estimate electricity, natural gas, and water use. In order to achieve internal consistency through this Draft EIR. (The same model used for air quality and GHG analyses was also used for the purpose of estimating energy use.

The construction office was assumed to be two 2,500 sf trailers and was modelled using CalEEMod's land use category for "General Office." Electricity demand by construction equipment was estimated using default horsepower (hp) and load factors from CalEEMod and hours of operation per day.³⁴ The total horsepower-hours (hp-h) were then converted to kilowatthours (kWh) using a standard conversion factor.³⁵ Electricity use from water conveyance for dust control on-site was conservatively estimated using a standard water usage factor per square foot for irrigated landscaping areas that would be generally equivalent to conveying water to a construction site.³⁶ The calculated water usage was then converted to electricity used for conveyance using default CalEEMod electricity intensity factors for the South Coast Air Basin.³⁷

The electricity demand under existing, baseline conditions was then subtracted from the construction electricity use to determine the net electricity use during construction of the Proposed Project.

Natural Gas

Natural gas would not be consumed in large quantity during construction of the Proposed Project because construction offices would not be heated with natural gas, and construction equipment and vehicles would be primarily powered by either diesel, gasoline, or electricity. However, the Proposed Project could use compressed natural gas (CNG) powered forklifts during construction. Therefore, natural gas associated with construction activities was calculated by converting the hp and usage factor provided in CalEEMod. The total hp-h of CNG-powered equipment was then multiplied by fuel usage estimates per hp-h to estimate the amount of CNG fuel used.³⁸

Transportation Fuels

Transportation fuels would be consumed for transportation of construction workers and materials to and from the Project Site, and operation of construction equipment on the Project Site throughout the construction phase.

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South Coast Air Quality Management District, CalEEMod User's Guide Appendix D: Default Data Tables, October 2017. http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4.
 Instructional State University Energy Measurements and Comparison 2009.

³⁵ Iowa State University, Energy Measurements and Conversions, 2008.

https://www.extension.iastate.edu/agdm/wholefarm/pdf/c6-86.pdf. Accessed March 2019.
 US Department of Energy, Energy Efficiency and Renewable Energy, Federal Energy Management Program.
 "Guidelines for Estimating Unmetered Landscaping Water Use". July 2010. p. 12, Table 4.
 https://www.energ.acv/sites/pred/files/2013/10/f5/st_upmetered_landscape_wtr.pdf

https://www.energy.gov/sites/prod/files/2013/10/f3/est_unmetered_landscape_wtr.pdf.
 South Coast Air Quality Management District, CalEEMod User's Guide Appendix D: Default Data Tables, October 2017. http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4.
 International Gas Union, Natural Gas Conversion Guide, 2012. http://agnatural.pt/documentos/ver/natural-gas-

³⁸ International Gas Union, Natural Gas Conversion Guide, 2012. http://agnatural.pt/documentos/ver/natural-gasconversion-guide_cb4f0ccd80ccaf88ca5ec336a38600867db5aaf1.pdf.

Fuel consumption from on-site heavy-duty construction equipment was calculated based on the equipment mix estimated by the project applicant and usage factors provided in the CalEEMod construction output files included in Appendix D of this Draft EIR. The total hp was then multiplied by fuel usage estimates per hp-h from CARB's off-road vehicle (OFFROAD) model.³⁹

Fuel consumption from construction on-road worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances consistent with the air quality and greenhouse gas emissions modeling worksheets and CalEEMod construction output files. Total VMT for these on-road vehicles were then calculated for each type of construction-related trip and divided by the corresponding county-specific miles per gallon factor using CARB's EMFAC2017 model. The model was used to calculate fuel consumed based on the total annual VMT for each vehicle type. A combination of CalEEMod assumed trip lengths and client-provided specific trip lengths were used for worker commutes, vendor and concrete trucks, and haul truck trips. Consistent with CalEEMod, construction worker trips were assumed to include a mix of light duty gasoline automobiles and light duty gasoline trucks. Construction vendor trucks were assumed to be a mix of medium-heavy duty and heavy duty diesel trucks and concrete and haul trucks were assumed to be heavy-duty diesel trucks. The fuel consumption of the baseline conditions was then subtracted from the construction fuel consumption to determine the net fuel consumption during construction of the Proposed Project. Please see Appendix G of this Draft EIR for detailed energy calculations.

The energy usage required for construction of the Proposed Project was estimated based on the number and type of construction equipment that would be used during construction by assuming a conservative estimate of construction activities (i.e., maximum daily equipment usage levels). Energy for construction worker commuting trips was estimated based on the predicted number of workers for the various phases of construction and the estimated VMT based on the conservative values in the CalEEMod and EMFAC2017 models. The assessment also includes a discussion of the Proposed Project's compliance with relevant energy-related regulatory requirements and incorporation of project design features discussed in Section 3.7, Greenhouse Gas Emissions, that would minimize the amount of energy usage during construction. These measures are also discussed in Chapter 2, Project Description; and Section 3.2, Air Quality, of this Draft EIR.

The estimated fuel economy for heavy-duty construction equipment was based on fuel consumption factors from the CARB OFFROAD emissions model, which is a state-approved model for estimating emissions from off-road heavy-duty equipment. The estimated fuel economy for haul trucks, vendor trucks, concrete trucks, and worker commute vehicles was based on fuel consumption factors from the CARB EMFAC2017 emissions model, which is a state-approved model for estimating emissions from on-road vehicles and trucks.

³⁹ California Air Resources Board, 2017. Off-Road Diesel Emission Factor Update for NO_x and PM. 2017. https://ww3.arb.ca.gov/msei/ordiesel/ordas_ef_fcf_2017.pdf.

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Operation

Operational energy impacts were assessed based on the increase in energy demand compared to baseline conditions described above. On-site existing uses would be demolished and removed to allow for development of the Proposed Project. The existing offsite LA Clippers facilities (team offices and training/practice facility) would be relocated to the Project Site.

The analysis assumes that an annual average of 5 pro-season, 41 regular season, and 3 postseason LA Clippers home NBA games would be losted at the new arena. The annual average number of post-season games was based on the average number of post-season home games per NBA team per year.

-Also, some events currently occurring at the Staples Center would be market-shifted to the IBEC. Therefore, operational energy associated with the baseline conditions (demolished existing uses, the offsite LA Clippers facilities, and market-shifted <u>non-NBA [confirm]</u> events) was subtracted from the total operations of the Project to calculate the net energy consumed by the Proposed Project. Within the CalEEMod software, building electricity and natural gas usage rates were adjusted to account for prior Title 24 Building Energy Efficiency Standards for the <u>existing</u> <u>hascline uses.⁴⁰ [Consider moving the previous sentence to the baseline description.] As</u> stated above, the net change in operational energy demand was based on the difference between the existing baseline condition energy demand and the energy demand of the Proposed Project at full buildout. The following discusses only the methodology for the new operations at the Project Site; the methodology for determining energy usage from the baseline conditions is described above.

Electricity

The Proposed Project's estimated electricity demand was analyzed relative to SCE's existing and planned energy supplies in 2024 (i.e., the Proposed Project buildout year)⁴¹ to determine whether the utility would be able to meet the Proposed Project's energy demands. Annual consumption of electricity (including electricity usage associated with the supply and conveyance of water) from operation of the Proposed Project's compliance with 2019 Title 24 building energy efficiency standards, which go into effect on January 1, 2020. Additionally, the Proposed Project's energy demand was analyzed relative to SCE's expected total capacity in 2024.

Electricity from water use associated with operation of the Proposed Project was calculated using CalEEMod and the Water Supply Assessment prepared for the Proposed Project, and the

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⁴⁰ California Air Resources Board, 2016. CalEEMod User's Guide, Appendix E, Section 5, September 2016, http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/06_appendix-e2016-3-1.pdf?sfvrsn=2. Accessed December 26, 2018. Factors for the prior Title 24 standard are extrapolated based on the technical source documentation.

⁴¹ California Energy Commission, 2018. Electricity and Natural Gas Demand Forecast, 2018. Available: http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-03/TN222287_20180120T141708_The_California_ Energy_Demand_20182030_Revised_Forecast.pdf. Accessed March 2019.

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electrical intensity factors for water supply and distribution. Water-related energy intensities in CalEEMod are based on the CEC's report *Refining Estimates of Water-Related Energy Use in California.*⁴² For more detail on the Water Supply Assessment, see Section 3.15, Utilities and Service Systems. The Water Supply Assessment is included in Appendix M of this Draft EIR.

Natural Gas

The Proposed Project's operational Natural natural gas demand for the Proposed Project would be generated mainly by building heating/cooling, restaurant kitchen equipment, and other appliances. The Proposed Project's estimated natural gas demand was analyzed relative to SoCalGas' existing and planned energy supplies in 2024 (i.e., the Proposed Project buildout year)⁴³ to determine whether the utility would be able to meet the Proposed Project's energy demands. Furthermore, natural gas demand generated by the baseline conditions were calculated using demand factors provided in CalEEMod and subtracted from the Proposed Project's natural gas demand to obtain the net annual natural gas demand.

Transportation Fuels

Mobile source emissions for the Proposed Project would include event-day trips related to LA Clippers games and other events at the arena, commute trips by arena and sports team management employees, vendors and suppliers, concert/event attendees, and visitor trips associated with the accompanying development land uses.

Energy demand due to the transportation of spectators, employees, vendors and suppliers, and visitors to and from the Project Site was estimated based on the predicted number of trips to and from the Project Site and the estimated VMT for the Proposed Project; see Section 3.14, Transportation and Circulation, and Appendix K for additional transportation-related details.

Based on the Proposed Project's annual operational VMT, gasoline and diesel consumption rates were calculated using the county-specific miles per gallon in EMFAC2017. The vehicle fleet mix for vehicles anticipated to visit the Project Site was calculated and deemed consistent with the CalEEMod defaults based on the Project Site's location within Los Angeles County. Supporting calculations are provided in Appendix G of this Draft EIR.

Project Design Features

The Proposed Project would include project design features that both directly and indirectly affect energy consumption and conservation. Section 3.7, *Greenhouse Gas Emissions*, provides details of the potential project design features resulting from the Proposed Project's expected Leadership

⁴² California Energy Commission, *Refining Estimates of Water-Related Energy Use in California*, PIER Final Project Report, CEC-500-2006-118, 2006. Available: https://www.energy.ca.gov/2006publications/CEC-500-2006-118/CEC-500-2006-118, pdf. Accessed April 5, 2019.

⁴³ California Gas and Electric Utilities, 2018. California Gas Report, 2018, p. 101-103. While the Project's Development Agreement is through 2040, comparison to the analyzed buildout year of 2025 provides a conservative analysis as supply projections for electricity and natural gas increase in future years.

in Energy and Environmental Design (LEED) Gold certification. A brief summary of the project design features that could be applicable to energy are described below:

• Location and Transportation. The Proposed Project would be eligible for LEED credits in the location and transportation category in the following areas: (1) the Project Site has access to high quality transit, (2) the Proposed Project would include bicycle and electric vehicle charging facilities, and (3) the Proposed Project would minimize its parking footprint.

Access to Quality Transit. The Proposed Project would be eligible to achieve the Access | to Quality Transit credit because local transit service to the Project Site would be provided by the Los Angeles Metropolitan Transportation Authority (Metro) in the form of future below- and at-grade light rail on the Metro Crenshaw/LAX Line, which is currently under construction and expected to be complete in 2019. The Proposed Project would provide shuttle pick-up and drop-off service at the following two Metro rail stations: the existing Metro Green Line – Hawthorne/Lennox Station and the future Metro Crenshaw/LAX Line – Florence/La Brea Station. In addition, the Proposed Project would also be served by above-ground, route bus service; the Project Site is located within a quarter of a mile of 8 existing Metro bus stops along the following four Metro routes, 117, 211/215, and 212/312.

<u>Green Valicles</u> The Proposed Project would also provide electric vehicle charging stations for 8 percent of parking spaces, which would exceed the requirements for the Proposed Project to be eligible for the Green Vehicles credit.

- Sustainable Sites. The Proposed Project would be eligible for LEED credits for rainwater management, open space, heat island reduction, and light pollution reduction. Credits for open space are based on the percentage of permeable surfaces.
- *Water Efficiency*. The Proposed Project would be eligible for LEED credits for the use of ultra-low flow fixtures in restrooms such as low flow faucets with aerators, dual flush toilets, and waterless urinals. These features would reduce indoor water use by a minimum of 40 percent and would be required to meet Universal Plumbing Code standards. The Proposed Project would also be eligible for credits for using 100 percent recycled water at the West Parking Garage and Arena sites to service project landscaping designed for low water usage.
- Energy and Atmosphere. The Proposed Project would be eligible for LEED credits for optimized energy performance and renewable energy production. The Proposed Project would include a 700-kilowatt (kW) PV system, generating approximately 1,085,000 kWh of carbon-free energy annually. The Proposed Project would also implement the following energy efficiency measures: Title 24 compliance; use of 100 percent light emitting diode (LED) lighting indoors and outdoors throughout the site; and implementation of high efficiency HVAC systems. In addition, the Proposed Project's design would include compliance with CALGreen Code Voluntary Tier 1, which is estimated to achieve a 10 percent reduction in energy consumption over Title 24 2019 standards based on the preliminary design of the Proposed Project.
- Materials and Resources. The Proposed Project would be eligible for LEED credits for
 Construction and Demolition Waste Management and sourcing of raw materials. The

3. Environmental Setting, Impacts, and Mitigation Measures [STYLEREF "Heading 3" \n] [STYLEREF "Heading 3"]

Proposed Project would recycle at least 75 percent of demolition materials, which exceeds the City of Inglewood's target of 50 percent demolition waste recycling and would be in accordance with state diversion targets that aim to divert a minimum of 75 percent of construction and demolition materials from landfill disposal.

Innovation. The Proposed Project would be eligible for innovation credits. Innovative strategies include the following: implementation of the FanFirst/Occupant Comfort Survey,⁴⁴ green education program, LEED Operations + Management (O+M) Starter Kit (Pest Management and Green Cleaning Program), and the <u>purchase_outchase_of 100</u> percent LED lamps.

Impacts and Mitigation Measures

Impact 3.5-1: Construction and operation of the Proposed Project could cause wasteful, inefficient, or unnecessary consumption of energy resources. (Less Than Significant)

Construction

During construction of the Proposed Project, energy would be consumed in the form of electricity for powering the construction trailers (lights, electronic equipment, and heating and cooling) and exterior uses, such as lights, water conveyance for dust control, and other construction activities. Natural gas would be used for CNG-powered off-road vehicles. Project construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the Project Site, construction workers travel to and from the Project Site, and delivery and haul truck trips (e.g., hauling of demolition material to offsite reuse and disposal facilities). <u>IGeneral comment: should be consistent about using either</u> "onsite" and "offsite," or "on-site" and "off-site."]

Table 3.5-3 provides a summary of the annual average electricity, natural gas, gasoline fuel, and diesel fuel estimated to be consumed during Project construction. Net construction energy use subtracts out all existing onsite use (see Table 3.5-2) from the construction energy use since the construction of the Proposed Project would require the demolition of all onsite existing uses. All off-site existing uses and market shifted events would be operational during construction and therefore are left out of the net energy calculation. Each of these is discussed and analyzed in greater detail in the sections below.

Electricity

During construction of the Proposed Project, electricity would be consumed to power lighting, heating, and cooling in the construction trailers, outdoor lighting of the site, electric equipment, and supply and convey water for dust control. Electricity would be supplied to the Project Site by SCE and would be obtained from the existing electrical lines that connect to the Project Site.

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⁴⁴ FanFirst Connected Comfort utilizes real time crowdsourced feedback during an event to adjust temperature in the arena bowl to increase fan comfort and reduce over cooling/wasted energy.

Energy Type	Annual Average Quantity During Construction ^b
Electricity	
Existing Onsite	(506 MWh)
Total Construction Electricity	1,248 MWh
Off-road Equipment	1,026 MWh
Construction Office	65 MWh
Electricity from Water (Dust Control)	157 MWh
Total Net Electricity	742 MWh
Natural Gas	
Existing Onsite	(1,566 MMBtu)
Off-road Equipment	254 MMBtu
Total Net Natural Gas	(1,312 MMBtu)
Gasoline	
Existing Onsite	(76,361 gallons)
On-road Construction Equipment	326,604 gallons
Off-road Construction Equipment	0 gallons
Total Net Gasoline	250,243 gallons
Diesel	
Existing Onsite	(7,567 gallons)
On-road Construction Equipment	183,440 gallons
Off-road Construction Equipment	139,291 gallons
Total Net Diesel	315,164 gallons
NOTES: kWh = kilowatt-hours; N/A = not applicable ^a Detailed calculations are provided in Apper ^b Totals may not add up due to rounding of d ^c Negative values are denoted using parenth	lecimals.
SOURCE: ESA, 2019; CalEEMod, 2019. EM	

SOURCE: ESA, 2019; CalEEMod, 2019. EMFAC, 2017

As shown in Table 3.5-3, annual average construction electricity usage would be approximately 1,248 MWh. The existing electricity usage at the Project Site is approximately 506 MWh annually; therefore, the average annual net construction electricity consumption would be increased by approximately 742 MWh per year. Although there is a temporary increase in electricity consumption at the site during construction, the electrical consumption would be within the supply and infrastructure capabilities of SCE (87,143 GWh net energy for 2018).⁴⁵ The

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⁴⁵ Southern California Edison, 2018 Annual Report, p. 2. https://www.edison.com/content/dam/eix/documents/ investors/corporate-governance/eix-sce-2018-annual-report.pdf.

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electricity demand at any given time would vary throughout the construction period based on the construction activities being performed, and would cease upon completion of construction. Electricity use from construction would be short-term, limited to working hours, used for necessary construction-related activities, and represent a small fraction of the Proposed Project's net annual operational electricity. Furthermore, the electricity used for off-road light construction equipment would have the effect of reducing construction-related air pollutant and GHG emissions from more traditional construction-related energy in the form of diesel fuel. Therefore, impacts from construction electrical demand would be **less than significant** and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Natural Gas

As stated above, construction activities, including the construction of new buildings and facilities, would consume natural gas in the form of CNG for powering a portion of the off-road equipment. CNG needed for this equipment would be brought to the site or the equipment taken to a CNG fueling station. Therefore, natural gas would not be directly supplied by SoCal Gas to support Project construction activities. Existing annual natural gas usage at the site equals 1,566 MMBtu. Annual natural gas demand for construction activities would be approximately 254 MMBtu. Therefore, the average annual net construction-natural gas consumption would be decreased by approximately 1,312 MMBtu per year during construction. Therefore, impacts from construction natural gas demand would be **less than significant** and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Transportation Energy

Table 3.5-3 reports the amount of petroleum-based transportation energy that could potentially be consumed during Proposed Project construction based on the conservative set of assumptions provided in Appendix G of this Draft EIR. As shown, the Project Site's current annual demand for gasoline is approximately 76,361 gallons of gasoline and approximately-7,567 gallons for of diesel fuel. During Proposed Project construction, on- and off-road vehicles would consume an estimated annual average of approximately 326,604 gallons of gasoline and 322,731 gallons of diesel. Proposed Project construction activities would last for approximately 40 months; therefore, the annual average net fuel consumption would be approximately 250,243 gallons of gasoline and 315,164 gallons of diesel per year of construction. For comparison informational purposes only, and not for the purpose of determining significance, the fuel usage during Project construction would represent approximately 0.01 percent of the 2017 annual on-road gasoline-related energy consumption and 0.07 percent of the 2017 annual diesel fuel-related energy consumption in Los Angeles County,⁴⁶ as shown in Appendix G of this Draft EIR.

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, crude oil

⁴⁶ California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2017, https://www.energy.ca.gov/almanac/transportation_data/gasoline/2010-2017_A15_Results.xlsx. Accessed December 26, 2018.

production would be sufficient to meet over 50 years of worldwide consumption.⁴⁷ The Proposed Project would comply with Corporate Average Fuel Economy (CAFE) fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicle trips would also comply with Pavley and Low Carbon Fuel Standards which are designed to reduce vehicle GHG emissions, but would also result in fuel savings in addition to compliance with CAFE standards.

Construction of the Proposed Project would utilize fuel-efficient equipment consistent with state and federal regulations, such as fuel efficiency regulations in accordance with the CARB Pavley Phase II standards, the anti-idling regulation in accordance with Section 2485 in Title 13 of the CCR, and fuel requirements for stationary equipment in accordance with Section 93115 (concerning Airborne Toxic Control Measures) in Title 17 of the CCR, and would comply with State measures to reduce the inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation fuels. While these regulations are intended to reduce construction emissions, compliance with the anti-idling and emissions regulations discussed above would also result in fuel savings from the use of more fuel-efficient engines.

In addition, the Proposed Project would divert mixed construction and demolition debris to Citycertified construction and demolition waste processors using City-certified waste haulers, consistent with State diversion-targets of 75 percent waste diversion by 2020 and consistent with achieving the USGBC LEED Gold Certification level as discussed in project design features (Green Building Features) in Section 3.7, Greenhouse Gas Emissions. Diversion of mixed construction and demolition debris would reduce truck trips to landfills, which are typically located some distance away from City centers, and increase the amount of waste recovered (e.g., recycled, reused, etc.) at material recovery facilities, thereby further reducing transportation fuel consumption.⁴⁸

Based on the analysis above, construction would utilize energy only for necessary on-site activities, <u>construction worker travel to and from the Project Site</u>, and to transport construction materials and demolition debris to and from the Project Site. As discussed above, idling restrictions and the use of cleaner, energy-efficient equipment would result in less fuel combustion and energy consumption and thus minimize the Proposed Project's construction-related energy use. Therefore, construction of the Proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy, and the impact would be **less than significant**.

⁴⁷ BP Global, Oil reserves, 2018, https://www.bp.com/en/global/corporate/energy-economics/statistical-review-ofworld-energy/oil.html. Accessed December 26, 2018.

⁸⁸ Energy savings result from the avoidance of needing to mine and process virgin materials and then transport those materials to the project. As shown on MS52 California Aggregates Map

⁽https://www.conservation.ca.gov/cgs/Documents/MS_52_California_Aggregates_Map_201807.pdf) Aggregate production areas in the Los Angeles areas include Irwindale and areas further away in Upland and Temescal Canyon areas in Orange County. Irwindale is a lesser producer of virgin aggregate as most of the mines have been depleted to their permitted limits. According to LA County

⁽https://dpw.lacounty.gov/epd/CD/cd_attachments/Recycling_Facilities.pdf) there are recycling facilities much closer that supply recycled aggregate and other construction materials to the region.

Operations

During operation of the Proposed Project, energy would be consumed for multiple purposes, including, but not limited to, heating ventilation, and air conditioning (HVAC), lighting, EV charging, emergency generators, aerial lifts, and forklifts for building operations. Energy would also be consumed during Proposed Project operations related to water usage, solid waste disposal, and vehicle trips.

On- and off-site existing uses shown in Table 3.5-2 are netted out of the Proposed Project's operational energy use. Market shifted events presented in **Table 3.5-4**, *Summary of Annual Energy Use During Project Operations*, are also netted from the Proposed Project's operational energy use. If is assumed that aAn estimated seven events would be backfilled at the Staples Center, and that the existing LA Clippers team office and LA Clippers practice and athletic training facilityeenter would be backfilled with new tenants once they are vacated by the LA Clippers.⁴⁹ The energy consumption for the LA Clippers practiceoffice and athletic training facility is conservatively assumed to be the same as the existing off-site energy demand because no specific tenants or changes in use have been identified. Energy consumption for the backfilled staples Center events have been calculated based on estimated event sizes. Energy consumption for the backfilled existing team office use <u>confirm</u> are added backfilled events and the backfilled existing team office use <u>confirm</u> are added backfilled as part of te-the Proposed Project's operational energy consumption.

As shown in Table 3.5-4, the Proposed Project's annual net new energy demand would be approximately 14,774 MWh of electricity, 18,631 MMBtu of natural gas, 739,555 gallons of gasoline, and 70,798 gallons of diesel fuel.

Source	Electricity (MWh/yr)	Natural Gas (MMBtu/yr) ⁶	Gasoline (gal)	Diesel (gal
Existing Uses (2018)	***************************************	*********		
Offsite	738	1,058	94,270	9,341
Onsite	506	1,601	81,722	8,098
Subtotal	1,244	2,659	175,992	17,439
Shifted Events (2024)				
Staples Center	1,346	2,488	510,823	18,171
Regional Event Venue	689	1,887	339,428	10,935
Subtotal	2,036	4,374	850,251	29,106
Backfill Uses (2024)				
Offsite	738	1,068	78,326	9,077
Staples Center	194	355	41,253	2,354

 TABLE 3.5-4

 SUMMARY OF ANNUAL ENERGY USE DURING PROJECT OPERATION 1,3

⁴⁹ AECOM, 2019. AB 987 Application for the Inglewood Basketball and Entertainment Center Project, Attachment 3, Exhibit 1, Staples Center Vacated Event Days Analysis. January 2019.

Source	Electricity (MWh/yr)	Natural Gas (MMBtu/yr) ⁶	Gasoline (gal)	Diesel (gal
Subtotal	931	1,423	119,579	11,431
Project (2024)				
Arena Site				
Arena/Team Offices/Practice Facility/Medical Clinic	4,749	9,867		34,207
Full-Service Restaurant/Bar/Coffee Shop/Quick Service Restaurant	835	6,205	1,133,334	
Retail	254	48		
Outdoor Plaza	2	0		
Parking Garage	1,365	322		
Cooling Tower	63	0	-	-
EV Charging Stations	84	0	-	-
Emergency Generators	-	-	-	8,975
Media Truck Power Hook-Ups	132	-	-	-
Operational Heavy-Duty Equipment	-	-	-	3,291
Subtotal	7,483	16,441	1,133,334	46,472
Ancillary Uses				
West Parking Garage	6,531	404		59,440
EV Charging (West Parking)	400	0	512,885	
East Parking Garage	767	0		
EV Charging (East Parking)	75	0		
East Site Hotel	1,838	7,397		
Transportation Hub	28	0		
Subtotal	9,639	7,800	512,885	59,440
Project Total	17,122	24,242	1,646,219	105,912
Net Total (Project + Backfill - Existing and Shifted Events)	14,774	18,631	739,555	70,798
SCE (2018) ¹ / SoCalGas (2018) ² / LA County Fuel Consumption (2017) ³	87,143,000	988,785,000	3,659,000,000	590,196,078
Project Contribution to LA County Consumption	0.017%	0.002%	0.020%	0.012%

TABLE 3.5-4 SUMMARY OF ANNUAL ENERGY USE DURING PROJECT OPERATION 1,3

NoTES:
 Southern California Edison, 2018 Annual Report, p.2. https://www.edison.com/content/dam/eix/documents/investors/corporate-governance/eix-sce-2018-annual-report.pdf.
 California Gas and Electric Utilities, 2018 California Gas Report, p. 102. https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf.
 California Energy Commission, California Annual Retail Fuel Outlet Report Results (2017). https://www.energy.ca.gov/almanac/transportation_data/gasoline/2010-2017_A15_Results.xlsx.
 All mobile emissions calculated using fleet mixes, vehicle types, fuel efficiencies, and fuel types from EMFAC2017.
 EMFAC2017 includes natural gas vehicles which are incorporated into natural gas totals in this table.
 Natural Gas consumption includes consumption of natural gas through vehicles that would access the Project site.

Electricity

Assuming compliance with 2019 Title 24 standards and applicable 2019 CALGreen requirements, at buildout the Proposed Project would result in a projected net increase in the annual demand for electricity totaling approximately 14,774 MWh, as shown in Table 3.5-4. In addition to compliance with CALGreen, the Proposed Project would also incorporate project design features (Green Building Features) as described in Section 3.7, Greenhouse Gas Emissions, of this Draft EIR. The design features would achieve USGBC LEED Gold Certification level, as well as reduce indoor water use by 40 percent and outdoor water use by 50 percent.

By 2020 SCE is required to procure at least 33 percent of its energy portfolio from renewable sources. SCE's current sources include wind, solar, and geothermal sources. These sources accounted for 32 percent of SCE's overall energy mix in 2017, the most recent year for which data are available, and represent the available off-site renewable sources of energy that would meet the Proposed Project's energy demand.⁵⁰

Based on SCE's collected data in its 2018 Annual Report, SC's total system sales for 2017-2018 fiscal year (the latest data available) was 87,143,000 MWh of electricity.⁵¹ As such, the Proposed Project-related net increase in annual electricity consumption of 14,774 MWh would represent approximately 0.017 percent of SCE's supplied electricity. Furthermore, SCE's projected energy demand for 2024 (the Proposed Project's opening year) is estimated at 106,000,000 MWh.⁵² The Proposed Project's future energy use would represent about 0.014 percent of total SCE sales and would be within SCE's projected electricity supplies. As previously described, the Proposed Project incorporates a variety of energy and water conservation measures and features to reduce energy usage and minimize energy demand as evidenced by the Proposed Project's reduced contribution to overall sales between 2018 and 2024. Therefore, with the incorporation of these measures and features, operation of the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of electricity and the impact would be **less than significant**.

Natural Gas

With compliance with 2019 Title 24 standards and applicable 2016 CALGreen requirements, at buildout, the Proposed Project would generate an estimated net increase in the on-site annual demand for natural gas totaling approximately 18,631 MMBtu, as shown in Table 3.5-4. As discussed above, in addition to complying with applicable regulatory requirements regarding energy conservation (e.g., California Building Energy Efficiency Standards and CALGreen), the Proposed Project would incorporate project design features to further reduce energy use. The

⁵⁰ California Energy Commission, Utility Annual Power Content Labels for 2017, SCE.

⁵¹ Southern California Edison, 2018 Annual Report, p. 2. https://www.edison.com/content/dam/eix/documents/ investors/corporate-governance/eix-sce-2018-annual-report.pdf.

⁵² California Energy Commission. 2018. The California Energy Demand 2018-2030 Revised Forecast. http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-03/TN222287_20180120T141708_The_California_ Energy_Demand_20182030_Revised_Forecast.pdf.

Proposed Project incorporates project design features (Green Building Features) as described in Section 3.7, Greenhouse Gas Emissions, which includes achievement of the USGBC LEED Gold Certification level.

In the 2018 California Gas Report, SoCalGas accounts for anticipated regional demand based on various factors including growth in employment by economic sector, growth in housing and population, and increasingly demanding State goals for reducing GHG emissions. SoCalGas accounts for an increase in employment and housing between from 2018 to 2035. The Proposed Project would add jobs within the SoCalGas region and would be consistent with the growth projections set forth in the 2018 California Gas Report.⁵³

Furthermore, the 2018 California Gas Report, estimates that natural gas supplies within SoCalGas' planning area will be approximately 923,282,100 MMBtu in 2024 (the <u>scar the</u> Proposed Project <u>would become operational'a buildout year</u>).⁵⁴ As stated above, the Proposed Project's annual net increase in demand for natural gas is estimated to be approximately 18,631 MMBtu. The Proposed Project would account for approximately 0.002 percent of the 2024 forecasted annual consumption in SoCalGas' planning area and would fall within SoCalGas' projected consumption for the area and would be consistent with SoCalGas' anticipated regional demand from population or economic growth.⁵⁵ Therefore, with the incorporation of these <u>measures and project design</u> features <u>described above</u>, operation of the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of natural gas, and the impact would be **less than significant**.

Transportation Energy

During operation, Proposed Project-related vehicle use would result in the consumption of petroleum-based fuels related to vehicular travel to and from the Project Site. The Project Site would be located near shopping areas with a grocery store, restaurants, and retail/commercial land uses, and the Project Site itself would be connected to multiple transit options through the use of shuttles in and around events, providing alternatives to the use of passenger vehicles, especially for the nearly 1.4 million people who would attend Proposed Project events each year. A majority of the vehicle fleet that would be used by the Proposed Project's employees and visitors would consist of light-duty automobiles and light-duty trucks, which are subject to fuel efficiency standards. Annual trips for the Proposed Project were estimated using trip rates provided in the Section 3.14, Transportation and Circulation, and Appendix K of this Draft EIR.

As reported in Table 3.5-4, the Proposed Project's estimated annual net increase in petroleumbased fuel usage would be approximately 739,555 gallons of gasoline and 70,798 gallons of diesel. Based on the California Energy Commission's *California Annual Retail Fuel Outlet*

⁵³ California Gas and Electric Utilities, 2018 California Gas Report, p. 63.
⁵⁴ California Cas and Electric Utilities, 2018 California Cas Report, p. 102

⁵⁴ California Gas and Electric Utilities, 2018 California Gas Report, p. 103.
⁵⁵ Note while setual operations would only accur for part of 2024, the appreciated setual operations.

⁵⁵ Note while actual operations would only occur for part of 2024, the energy analysis assumes a full year of operations to present a conservative estimate, as energy efficiencies will increase in subsequent years, therefore reducing energy consumption from the same activities.

Report, residents and employees in Los Angeles County consumed 3,659,000,000 gallons of gasoline and approximately 590,200,000 gallons of diesel fuel in 2017.⁵⁶ The Proposed Project would account for 0.020 percent of County-wide gasoline consumption and 0.012 percent of County-wide diesel consumption, based on the available County fuel sales data for the year 2017.

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, crude oil production would be sufficient to meet over 50 years of worldwide consumption.⁵⁷ The Fuels used for vehicle trips resulting from the Proposed Project would be required to comply with CAFE fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). <u>Vehicles used for</u> Project-related vehicle trips would also comply as <u>applicable</u> with Pavley and Low Carbon Fuel Standards which are designed to reduce vehicle GHG emissions, but would also result in fuel savings, in addition to compliance with CAFE standards.

The Proposed Project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles for the reasons provided below. As discussed in detail in Section 3.10, Land Use and Planning, the Proposed Project design and characteristics would be consistent with and would not conflict with the goals of the SCAG 2016 RTP/SCS. As discussed below under Impact 3.5-2, the mixed use design of the Proposed Project would increase the density of an infill site served by a variety of transit options. 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. The Proposed Project also would provide shuttle service from the Metro Orecn Line's Hawthorne/Lennox Station and the Metro Crenshaw/LAX Line's La Brea/Florence Station to the Project Site during LA Clippers basketball games and ofber large events.

The close proximity of the Proposed Project to retail, restaurant, entertainment, commercial, and job destinations supports achievement of reductions in VMT. Additionally, the Project design would provide for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations for a minimum of 8 percent of the parking spaces pursuant to the CALGreen Code and LAMC, reducing the amount of fossil fuel consumed during vehicular travel to and from the Proposed Project.

For the reasons described above, the Proposed Project would minimize reduce operational transportation fuel demand consistent with and not in conflict with State, regional, and City goals.

⁵⁶ California Energy Commission, California Annual Retail Fuel Outlet Report, 2017, https://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html. Accessed December 26, 2018.

⁵⁷ BP Global, Oil reserves, 2018, https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/oil.html. Accessed December 2018.

Therefore, operation of the Proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy and the impact would be **less than significant**.

Mitigation Measure

None required.

Impact 3.5-2: Construction and operation of the Proposed Project and have the potential to conflict with or obstruct a State or local plan for renewable energy or energy efficiency. (Less Than Significant with Mitigation)

CALGreen Code and Title 24

The Proposed Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. The Proposed Project would comply with CALGreen and Title 24 requirements to reduce energy consumption by implementing energy efficient building designs, reducing indoor and outdoor water demand, providing EV charging spaces, and installing energy-efficient appliances and equipment.

The Proposed Project would be designed to obtain a LEED Gold level of certification. The Proposed Project would be designed to optimize building energy performance with a minimum of a 5 percent reduction from the CCR, Title 24, Part 11 baseline requirement (this corresponds to a minimum of 18 percent energy efficiency beyond the American Society of Heating, Refrigerating and Air-Conditioning Engineers [ASHRAE] Standard 90.1).

Final design of the Proposed Project has not yet been finalized and is still being refined; therefore specific green building strategies to obtain LEED certification for each proposed building have not been fully identified. However, LEED Certification of the Proposed Project necessarily could not occur prior to the completion of construction. The strategies and measures identified in the IBEC Project AB 987 Application demonstrate that the IBEC Project will meet LEED Gold Certification requirements, as appropriate at this stage in the design and approval process. The LEED scorecards (included as Attachment B to the IBEC Project AB 987 Application and extion plane) would be key components of the Project's Basis of Design documentation required for compliance with the Title 24 commissioning requirements and the LEED collaborative design requirements. Compliance with LEED requirements would be demonstrated in a two-step process - with a first submittal being made at the completion of design, and a second submittal upon completion of construction. The credit strategies identified on the LEED scorecard would be monitored and approved through each design submittal. LEED Gold certification achieved through this process would be anticipated prior to completion of the first NBA season <u>af the new</u> arguit (expected to be June 30, 2025).

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The Proposed Project would implement LEED efficiency strategies and incorporate water conservation, energy conservation, and other features consistent with the CALGreen, Title 24, and City sustainability goals. As a result, the Proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. However, since the final design of the Proposed Project is not yet available, the exact nature and energy efficiency of the LEED requirements is not known. As a result of this uncertainty, the Proposed Project's impacts would be considered **potentially significant**.

SCAG 2016-2040 RTP/SCS

As discussed in Section; 3.7, Greenhouse Gas Emissions; Section 3.10 Land Use and Planning; and Section 3.14 Transportation and Circulation, the Proposed Project would be consistent with the 2016-2040 RTP/SCS. SCAG's 2016-2040 RTP/SCS is designed to support development of compact communities in existing urban areas, with more mixed-use and infill development, and reuse of developed land that is also accessible to transit and/or served by high quality transit. The 2016-2040 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by reducing VMT to achieve an 8 percent reduction in passenger vehicle emissions by 2020, 18 percent reduction by 2035, and 21 percent reduction by 2040 compared to the 2005 level on a per capita basis. Section 3.7, Greenhouse Gas Emissions, details the features incorporated into the Proposed Project to reduce vehicle trips, resulting in less gasoline and diesel fuel use.

Overall, the Project would be consistent with the goals and policies of SCAG's 2016-40 RTP/SCS because it is infill site accessible to transit, and by supporting reductions in VMT to and from the Project Site. Although the 2016-2040 RTP/SCS is not technically an energy efficiency plan, consistency with the RTP/SCS has energy implications, including the reduction of VMT from the plan which reduces GHG emissions and reduces fossil fuel consumption from travel to and from the Project Site. For these reasons, the impact would be **less than significant**

City of Inglewood ECAP

ECAP implementation are is expected to reduce emissions by 18.8 percent below 2005 levels by 2020, enabling the City to meet its 2005 target. However, the City would however, need to reduce emissions by an additional 111,702 MT CO₂e per year by 2035 to meet its 2035 target. The ECAP identifies a number of strategies aimed at reducing emissions through increased energy efficiency, renewable energy generation, improved transit options, and reduced consumption and waste. Based on the concept designs, the Proposed Project would be consistent with the City's ECAP. However, because the final design of the Proposed Project is not yet available and the specific LEED credits and project features are not finalized, the impact is considered **potentially significant**. See Section 3.7, Greenhouse Gas Emissions, for a detailed explanation of each strategy and the Project's consistency with the energy efficiency goal of the ECAP.

Summary

The Proposed Project would incorporate physical design features such that it would be consistent with applicable plans, policies and regulations adopted for the purpose of promoting renewable

energy and overall energy efficiency. However, because the exact measures to achieve LEED Gold Certification have not yet been determined, the impact would be **potentially significant**.

Mitigation Measure

Mitigation Measure 3.5-2

Implement Mitigation Measure 3.7-1(a).

Level of Significance After Mitigation: Implementation of Mitigation Measure 3.5-2 would incorporate physical design features, on-site energy reduction measures, and off-site energy reduction measures to reduce energy consumption. As a result of implementation of <u>Mitigation</u> <u>Measure 3.5-2 would</u> optimized energy performance and renewable energy production, the impact would be **less than significant**.

3.5.6 Cumulative Impacts

Impact 3.5-3: Construction and operation of the Proposed Project, in conjunction with other cumulative development, could cause wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation of the Proposed Project. (Less Than Significant)

Electricity

The geographic context for the cumulative analysis of electricity is SCE's service area. Growth within this <u>geography service area</u> is anticipated to increase the demand for electricity and the need for infrastructure, such as new or expanded facilities.

Future development, including the Proposed Project, would result in the increased use of electricity resources. However, SCE has determined that the use of such resources would be minor compared to existing supply and infrastructure within the SCE service area and would be consistent with growth expectations.⁵⁸ Furthermore, like the Proposed Project, other cumulative developments would be required to incorporate energy conservation features in order to comply with applicable mandatory regulations including CALGreen Code, state energy standards under Title 24, and incorporate mitigation measures, as necessary. Therefore, the <u>Proposed Project's constitution to electricity consumption would not be cumulatively considerable, and the cumulative electricity impact would be **less than significant**.</u>

Natural Gas [Fix formatting].

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⁵⁸ California Energy Commission, 2018. Electricity and Natural Gas Demand Forecast, 2018. Available: http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-03/TN222287_20180120T141708_The_California_ Energy_Demand_20182030_Revised_Forecast.pdf. Accessed March 2019.

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The geographic context for the cumulative analysis of natural gas is the SoCalGas service area. Growth within these geographythis service area is anticipated to increase the demand for natural gas and the need for infrastructure, such as new or expanded facilities.

Cumulative development projects, including the Proposed Project, in the SoCalGas service area would result in the use of natural gas resources, however the use of such resources would be on a relatively small scale and would be consistent with regional and local growth expectations for SoCalGas' service area. Further, like the Proposed Project, other future development projects would be required to incorporate energy conservation features in order to comply with applicable mandatory regulations including CALGreen and State energy standards in Title 24, and incorporate mitigation measures, as necessary. Therefore, the <u>Proposed Project would not have a</u> cumulatively considerable contribution to natural gas consumption and the cumulative impact would be **less than significant**.

Transportation Energy

The geographic context for the cumulative analysis of transportation energy is the SCAG region. Growth within these geographythis region is anticipated to increase the demand for transportation and the need for infrastructure, such as new or expanded facilities.

Buildout of the Proposed Project and cumulative projects in the SCAG region would be expected to increase overall VMT, however, the effect on transportation fuel demand would be reduced by future improvements to vehicle fuel economy puratant to Federal and State regulations. Cumulative development projects would need to domonstrate consistency with Federal and State fuel efficiency goals as well as incorporate mitigation measures as required under CEQA. By 2025, vehicles are required to achieve 54.5 mpg (based on USEPA measurements), which is a 54 percent increase from the 35.5 mpg standard in the 2012-2016 standards. Siting land use development projects at infill sites is consistent with the State's overall goals to reduce VMT pursuant to SB 375. Cumulative development projects would need to transportation energy efficiency. Therefore, as the Proposed Project would reflect land use characteristics and incorporate TDM measures consistent with State goals for reducing VMT, the Proposed Project would need to transportation energy consumption, and the impact would be less than significant.

Impact 3.5-4: Implementation of the Proposed Project, in conjunction with other cumulative development, could conflict with or obstruct a State or local plan for renewable energy or energy efficiency. (Less Than Significant with Mitigation)

The geographic scope of analysis for cumulative impacts related to compliance with State or local plans for renewable energy or energy efficiency includes those past, present, and reasonably

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foreseeable cumulative projects located within the in the City of Inglewood and the surrounding area, as identified in Table 3.0-2, Cumulative Projects List (see Chapter 3.0, Section 3.0.5).

Pursuant to State law, all present and reasonably foreseeable cumulative projects would be required to comply with CALGreen and Title 24 energy efficiency requirements, which would reduce energy consumption by implementing energy efficient building designs and installing energy-efficient appliances and equipment, among other measures. Cumulative development projects would be required to comply with Title 24 regulations, and would support and promote the use of renewable energy and energy efficiency. However, since the final design of the Proposed Project and other cumulative development projects is not yet known, the potential exists for conflicts with Title 24 standards for renewable energy or energy efficiency. As a result of this uncertainty, the cumulative impact would be considered **potentially significant**.

Cumulative development-projects that undergo environmental review by CEQA are likely to demonstrate characteristics that would be consistent with the guidance provided in the SCAO 2016 RTP/SCS. The All of the sumulative development projects included in Table 3.0-1 are in the SCAG region and are infill projects which would be constructed within existing urbanized areas and, therefore, demonstrate characteristics that would be constructed within existing urbanized areas and, therefore, demonstrate characteristics that would be consistent with the guidance provided in the SCAG 2016 RTP/SCS. As infill developments, these projects would support development of compact communities in existing urban areas, with more mixed-use and infill development, and reuse of developed land that is also accessible to transit and/or served by high quality g transit. Development of infill areas supports the reduction of VMT by locating jobs and housing in closer proximity to each other, thereby reducing energy consumption and GHG emissions. VMT reductions also result in reducing fossil fuel consumption from travel to and from project sites within the cumulative context. Since the Proposed Project and other cumulative projects would support the RTP/SCS goals for infill of existing urbanized areas, the cumulative impact would be considered **less than significant**.

Based on the evaluation of the Cumulative Projects List presented in Table 3.0-2, 32 of the 147 cumulative projects in the Cumulative Projects List presented in Table 3.0-2 are located within the City of Inglewood (Cumulative Projects numbers 42 through 73). Each of those 32 cumulative projects in the City of Inglewood would be expected to comply with the energy efficiency goal established in the ECAP. The ECAP identifies a number of strategies aimed at reducing emissions through increased energy efficiency, renewable energy generation, improved transit options, and reduced consumption and waste. However, because the final design of the cumulative projects is not yet known, the impact is considered **potentially significant**.

For the reasons described above, cumulative development including the Proposed Project could have the potential to conflict with or obstruct implementation of a State or local plan for renewable energy or energy efficiency, and the cumulative impact would be **potentially significant**. Because the Proposed Project is a major project and, as discussed above under Impact 3.5-2, uncertainty exists regarding its compliance with Title 24, LEED Gold requirements,

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and the City's ECAP, the project <u>would could</u> have a considerable contribution to this significant impact and, thus, the cumulative impact is considered **potentially significant**.

Mitigation Measure

Mitigation Measure 3.5-4

Implement Mitigation Measure 3.7-1(a).

Level of Significance After Mitigation: Implementation of Mitigation Measure 3.5-4 would incorporate physical design features, on-site energy reduction measures, and off-site energy reduction measures into the Proposed Project to reduce energy consumption and ensure compliance with Title 24, LEED Gold certification, and the City's ECAP. Therefore, with mitigation the Proposed Project would not <u>have a considerable contribute-contribution</u> to cumulative conflicts with implementation of a State or local plan for renewable energy or energy efficiency. Therefore, the cumulative impact would be **less than significant**.

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