3.5 Energy Demand and Conservation

3.5.1 Introduction

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

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

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

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

3.5.2 Environmental Setting

Regional Setting

Electricity

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

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

1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts (MW), which is one million watts, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is one billion watt-hours.

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

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

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

Natural Gas

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

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

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

3 California Energy Commission, Hydroelectric Power in California. [HYPERLINK "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, [HYPERLINK "https://www.energy.ca.gov/pcl/labels/2017_labels/SCE_2017_PCL.pdf"]. Accessed March 2019.

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

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 supply source, and Canadian sources provide only a small share of SoCalGas supplies due to the high cost of transport.[9] Gas supply available to SoCalGas from California sources averaged 323 million cf per day in 2017, the most recent year for which data are available.[10]

Existing gas lines in the vicinity of the Project Site extend west to east along 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]

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6 SoCalGas, Company Profile, https://www.socalgas.com/about-us/company-profile. Accessed March 2019.
7 California Gas and Electric Utilities, 2018 California Gas Report, 2018, page 40, [HYPERLINK "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, page 40.
9 California Gas and Electric Utilities, 2018 California Gas Report, page 40.
10 California Gas and Electric Utilities, 2018 California Gas Report, page 32.
11 California Energy Commission, Final 2017 Integrated Energy Policy Report, page 3, [HYPERLINK "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, [HYPERLINK "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.

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]

Project Site

The entire 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 approximately 23 acres, or more than 85 percent of the Project Site. The six developed parcels include a fast-food restaurant, a motel, a light manufacturing/warehouse facility, a warehouse, a commercial catering business, and a groundwater well and related facilities.

All of these uses, besides the currently unoccupied light manufacturing/warehouse facility, 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 five active land uses, 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 use for the active uses within the Project Site are summarized in **Table 3.5-1**, *Estimated Existing Energy Consumption.* Detailed energy calculations are provided in Appendix D of this Draft EIR.

[13] California Energy Commission, 2016-2017 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program, May 2016, [HYPERLINK "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, page 213, https://efiling.energy.ca.gov/getdocument.aspx?tn=223205. Accessed March 2019.

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

TABLE 3.5-1
ESTIMATED EXISTING ENERGY CONSUMPTION

Emissions Sources	Electricity (MWh)	Natural Gas (therms)	Gasoline (gallons)	Diesel (gallons)
Existing				
Fast Food Restaurant	9,999	9,999	9,999	9,999
Motel	999	999	999	999
Warehouse	999	999	999	999
Commercial (Catering)	999	999	999	999
Manufacturing/Warehouse (vacant)	-	-	-	-
Water Well	999	999	999	999
Total	**9,999**	**9,999**	**9,999**	**9,999**

NOTES:

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

[b] CO_2e emissions are calculated using the global warming potential values from the IPCC AR4.

SOURCE: ESA, 2019 [ADD SOURCE: cite the source of the estimates for energy use. Based on site-specific data, or on industry estimates for such uses?]

3.5.3 Adjusted Baseline Environmental Setting

As described in Chapter 3, Environmental Impacts, Settings, and Mitigation Measures, the analysis in this section assumes the Adjusted Baseline Environmental Setting. 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 (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 are not relevant to the impacts and thresholds related to energy demand and conservation associated with the Proposed Project. No other changes to the existing environmental setting related to energy demand and conservation would occur under the Adjusted Baseline Environmental Setting.

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 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, heavy-duty 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 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

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

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 (Public Resources Code 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 (Public Resources Code section 25301(a)). The 2017 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California including energy efficiency, strategies related to data for improved decisions in the Existing Buildings Energy Efficiency Action Plan, building energy efficiency standards, the impact of drought on California's energy system, achieving 50 percent renewables by 2030, the California Energy Demand Forecast, the Natural Gas Outlook, the Transportation Energy Demand Forecast, Alternative and Renewable Fuel and Vehicle Technology Program benefits updates, an update on electricity infrastructure in Southern California, an update on trends in California's sources of crude oil, an update on California's nuclear plants, and other energy issues.

California Global Warming Solutions Act of 2006

In 2006, Governor Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006 (codified in the California Health and Safety Code (HSC), Division 25.5), which focused

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

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, Greenhouse Gas Emissions, 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.

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

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were adopted to ensure that building

[20] SB 1078 (Chapter 526, Statutes of 2002); SB 107 (Chapter 464, Statutes of 2006); Executive Order S-14-08.
[21] California Public Utilities Commission, RPS Program Overview, [HYPERLINK "http://www.cpuc.ca.gov/RPS_Overview/"]. Accessed April 25, 2019.

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) go into effect on January 1, 2020.

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, 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.

California Assembly Bill (AB) 1493 (Pavley)

The transportation sector accounts for more than half of California's carbon dioxide (CO_2) emissions. AB 1493 (commonly referred to as CARB's Pavley regulations), enacted on July 22, 2002, requires CARB to set GHG emission standards for new passenger vehicles, light duty trucks, and other vehicles manufactured in and after 2009 whose primary use is non-commercial personal transportation. Phase I of the legislation established standards for model years 2009–

[22] California Energy Commission, 2016 Building Energy Efficiency Standards, [HYPERLINK "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, [HYPERLINK "http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf.%20Accessed%20December%2026"], 2018.

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

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.

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

In 2004, CARB adopted an Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling to reduce public exposure to diesel particulate matter emissions (Title 13 California Code of Regulations [CCR] Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure 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.

Low Carbon Fuel Standard

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

Regulation to Reduce Emissions of Diesel Particulate Matter, Nitrogen Oxides and other Criteria 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

[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.

[26] 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.cgi/P100EZ7C.PDF?Dockey=P100EZ7C.PDF. Accessed March 2019.

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 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, subdivision (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

[27] Cummins, Inc., Cummins Tier-4-Final Field Test Showed 10% Lower Fuel Consumption, March 5, 2014, [HYPERLINK "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, [HYPERLINK "https://www.arb.ca.gov/cc/ccms/ccms.htm"], last reviewed January 11, 2017. Accessed March 2019.

and any renewable energy features that could be incorporated into the project. (Guidelines, § 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

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization for the region in which the City of Inglewood is located. In April 2016, SCAG adopted the *2016 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life* (RTP/SCS), which is an update to the previous 2012 RTP/SCS.[29]

The 2016 RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2016 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by 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. Compliance with and implementation of 2016 RTP/SCS policies and strategies would have co-benefits of reducing per capita energy demand and fuel use associated with reduced per capita vehicle miles traveled (VMT).

SCAG's 2016 RTP/SCS builds on the land use policies that were incorporated into the 2012 RTP/SCS, and provides specific strategies for successful implementation. These strategies include development of "complete communities," defined as mixed-use districts that concentrate

[29] Southern California Association of Governments, 2016. *2016 Regional Transportation Plan/Sustainable Communities Strategy Executive Summary*. Available: http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_ExecSummary.pdf. Accessed March 11, 2019. Adopted April 2016.

housing, employment, and a mix of retail and services in close proximity to each other; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "complete streets" policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles. The 2016 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region's high quality transit areas (HQTAs), which SCAG defines as areas within one-half mile of a well-serviced fixed guideway transit stop, and it includes bus transit corridors where buses pick up passengers every 15 minutes or less during peak commute hours.

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

In addition, the 2016 RTP/SCS includes goals and strategies to promote active transportation and improve transportation demand management (TDM). The 2016 RTP/SCS strategies support local planning and projects that serve short trips, increase access to transit, expand understanding and consideration of public health in the development of local plans and projects, and support improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. Please see Section 3.7, Greenhouse Gas Emissions, of this EIR for additional details regarding the 2016 RTP/SCS.

The central goal of the 2016 RTP/SCS of reducing GHG emissions through land use planning and reducing VMT is directly related to reduced energy consumption. Many of the emission reduction goals of the 2016 RTP/SCS would require reducing vehicular usage through the promotion of co-locating diverse land uses that can be easily accessed by pedestrians, bicyclists, and/or public transit. Meeting these goals would result in less passenger vehicle travel and ultimately less fossil fuel use.

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.[30]

> **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 under Impact 3.14-X.

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.[31] The ECAP includes a business-as-usual (BAU) forecast that estimates future emissions in 2020 and 2035 from six sectors: commercial and municipal; industrial; residential; transportation; solid waste; and water. The BAU forecast assumes a future under regulatory conditions as they existed in 2010, and it does not include the effects of updates to Title 24, the Renewables Portfolio Standard, and the Pavley Clean Car Standards on future GHG emissions. Under the BAU forecast, Inglewood's total GHG emissions are expected to increase approximately 14 percent from 2010 (594,273 $MTCO_2e$) to 2035 (678,283 $MTCO_2e$). On a per-service population (SP)[32] basis, the increase is shown to be just 4.5 percent, from 4.22 $MTCO_2e$/SP in 2010 to 4.41 $MTCO_2e$/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

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

31 City of Inglewood, 2013. *Inglewood Energy and Climate Action Plan*. Available: [HYPERLINK "https://www.cityofinglewood.org/225/Sustainability"]. Accessed February 15, 2019. March 2013.

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

Strategy 2: Increase Energy Efficiency

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

Strategy 3: Support Renewable Energy Generation

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

Strategy 4: Improve Transportation Options and Manage Transportation Demand

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

Strategy 5: Reduce Consumption and Waste

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

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

3.5.5 Analysis, Impacts and Mitigation

Significance Criteria

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

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

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. Specific assumptions and data sources needed to quantify energy consumption during both construction and operation is presented. The general basis for the energy calculations (see Appendix X of this Draft EIR) are 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 LA Clippers games at the Staples Center, LA Clippers' team business operations, on-site 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.

The analysis assumes that an annual average of 5 pre-season, 41 regular season, and 3 postseason LA Clippers home games would be hosted at the 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. These 48 LA Clippers home games are considered part of the Proposed Project baseline conditions.

The baseline conditions analysis conservatively assumes that half of the non-NBA game events (e.g., concerts, family shows, non-NBA sports games) anticipated to occur at the Arena Site would be new events that would not otherwise occur in the Los Angeles area, and half of non-NBA game events would have otherwise occurred at other venues in the Los Angeles area, but would be relocated at the Project Site, the latter of which are referred to as market-shifted events. The market-shifted events are considered part of the Adjusted Baseline Environmental Setting conditions of the Proposed Project.

This analysis also conservatively assumes the emissions from the existing LA Clippers Team Offices, which are located at 1212 South Flower Street, Los Angeles, California, and the existing LA Clippers Training Center, which is located at 6854 South Centinela Avenue in Los Angeles, California, which are not included in the baseline. 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' Training Center, it would be speculative to assume what type of use might occupy it in the future given its unique design and space allocation, but for the purposes of this analysis it is assumed that a new tenant will backfill it with a similar emissions profile. Thus, the existing emissions from operations of both the Team Offices and the Training Center are not considered part of the Project baseline conditions.

Development of the Proposed Project would first require the acquisition of the properties located within the Project Site, including several parcels that are currently developed with existing on-site uses. Existing buildings within the Project Site include a 16,806 sf motel; 1,118 sf fast food restaurant; 28,809 sf light industrial building; 1,134 sf commercial building; and a 6,321sf light manufacturing/industrial warehouse. The Alternate Prairie Access Variant would involve two additional parcels, if made available for sale by the current property owners and acquired by the project applicant. Current uses on those parcels consist of a 1,628 sf three-unit residential building and a 795 sf single-family residence. Energy use associated with the existing buildings that would be removed prior to construction of the Proposed Project or the Alternate Prairie Access Variant were included in the baseline conditions. For purposes of this analysis, the infrastructure improvements included in the HPSP Adjusted Baseline project are not relevant to the impacts and thresholds related to energy demand and conservation associated with the Proposed Project. 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 of the existing land uses.

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 light and cool the construction trailers, conveyance of water for dust control, and any electrically-driven construction equipment. Construction activities can vary substantially from day to day, depending on the specific type of construction activity and the number of workers and vendors traveling to the Project Site. This analysis considers these factors and provides the estimated maximum construction energy consumption for the purposes of evaluating the associated impacts on energy resources. Construction of the Proposed Project could start as early as July 2021, but may commence at a later date. If, for various site planning, financial, or other reasons, the onset of construction is delayed to a later date than assumed in the modeling 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, construction equipment that would use electricity as an alternative to diesel fuel, and for water usage from dust

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

control activities. The construction office was assumed to be a 2,500 sf trailer and was modelled using CalEEMod's land use category for "General Office". In addition to outputting emissions, CalEEMod provides for estimation of annual electricity, natural gas, and water use. Electricity demand by construction equipment was estimated using default horsepower (hp) and load factors from CalEEMod and hours of operation per day provided by the Applicant.[34] The total horsepower-hours (hp-h) were then converted to kilowatt-hours (kWh) using a standard conversion factor.[35] The electricity demand of the baseline conditions was then subtracted from the construction electricity use to determine the net electricity use during Construction of the Proposed Project. 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]

Natural Gas

Natural gas is not expected to be consumed in large quantity during construction of the Proposed Project since construction offices would not be heated and construction equipment and vehicles are 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

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 X 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

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34 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.

35 Iowa State University, Energy Measurements and Conversions, 2008. [HYPERLINK "https://www.extension.iastate.edu/agdm/wholefarm/pdf/c6-86.pdf"]. Accessed March 2019.

36 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. [HYPERLINK "https://www.energy.gov/sites/prod/files/2013/10/f3/est_unmetered_landscape_wtr.pdf"].

37 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.

38 International Gas Union, Natural Gas Conversion Guide, 2012. [HYPERLINK "http://agnatural.pt/documentos/ver/natural-gas-conversion-guide_cb4f0ccd80ccaf88ca5ec336a38600867db5aaf1.pdf"].

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.

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. Although EMFAC2017 has not been approved by the United States Environmental Protection Agency (US EPA), both EMFAC2014 and EMFAC2017 were used to calculate emissions. These models were 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 truck 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. Refer to Appendix X of this Draft EIR for detailed energy calculations.

The energy usage required for construction of the Proposed Project has been 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 GHG-PDF-1 that would minimize the amount of energy usage during construction. These measures are also discussed in Chapter 2, Project Description, Section 3.2, Air Quality, and Section 3.7, Greenhouse Gas Emissions, of this Draft EIR.

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

Operation

Operational energy impacts were assessed based on the increase in energy demand compared to baseline conditions described above. Under CEQA, the existing environmental setting for an EIR is generally established at or around the time that the NOP for the EIR is published. On-site existing uses would be demolished and removed to allow for development of 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 existing

uses.[40] As stated above, the net change in operational energy demand is based on the difference between the existing baseline condition energy demand and the energy demand of the Proposed Project at full buildout.

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 if 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 was calculated using demand factors provided in CalEEMod and adjusted for the Proposed Project's compliance with 2019 Title 24 building energy efficiency standards, which go into effect on January 1, 2020. The CEC estimated that the 2019 Title 24 standards are 53 percent more efficient than the 2016 Title 24 standards for residential construction and 30 percent more efficient for non-residential construction.[42] 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 are calculated using CalEEMod and the Water Supply Assessment prepared for the Proposed Project, and the 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*.[43] For more detail on the Water Supply Assessment, see Section 3.15, Utilities.

Natural Gas

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)[44] to determine if 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. Natural gas demand for the Proposed Project would be generated mainly by building heating/cooling and appliances.

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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.

42 California Energy Commission, 2019 Building Energy Efficiency Standards FAQ, https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf. Accessed March 2019.

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

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

Transportation Fuels

Mobile source emissions for the Proposed Project 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 residents, 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 obtained from the Transportation Impact Analysis (TIA) included in Appendix X of this Draft EIR. Fuel use was also estimated from diesel generators and light carts used to provide ancillary power and lighting to trailers and tour/team buses. The assessment also includes a discussion of the Proposed Project's compliance with relevant energy-related regulations, the incorporation of GHG-PDF-1 and WS-PDF-1, and the land use transportation characteristics that would minimize the amount of transportation energy usage during operations. These features and characteristics are also discussed in Chapter 2, Project Description, Section 3.2, Air Quality, Section 3.7, Greenhouse Gas Emissions, and Section 3.15, Utilities and Service Systems, of this Draft EIR.

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 X of this Draft EIR.

Impacts and Mitigation Measures