

IV. Environmental Impact Analysis

D. Energy

1. Introduction

This section analyzes impacts on energy resources due to construction and operation of the Project. Section 15126.2 (b) of the 2019 California Environmental Quality Act (CEQA) Guidelines states that a project's energy use shall be analyzed to determine the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy, as well as being compliant with building codes and renewable energy features. Appendix G to State CEQA Guidelines checklist, Section VI, *Energy*, includes questions to assist lead agencies when assessing a project's potential energy impacts. Additionally, State CEQA Guidelines Appendix F provides guidance on information to use when evaluating a project's energy use.

In accordance with the applicable Appendix G sections, and utilizing guidance from Appendix F to the State CEQA Guidelines, this Draft EIR includes relevant information and analyses that address the energy implications of the Project, focusing on the following three energy resources: electricity, natural gas, and transportation-related energy (petroleum-based fuels). Detailed energy calculations can be found in Appendix E to this Draft EIR. Information found herein, as well as other aspects of the Project's energy implications, are discussed in greater detail elsewhere in this Draft EIR, including in Section II, Project Description, Section IV.C, Greenhouse Gas Emissions, and Section IV.K.1, Utilities and Service Systems – Water Supply and Infrastructure.

2. Environmental Setting

a. Regulatory Framework

There are several plans, regulations, and programs that include policies, requirements, and guidelines regarding energy at the federal, state, regional, and City of Los Angeles levels. As described below, these plans, guidelines, and laws include the following:

- Corporate Average Fuel Economy (CAFE) Standards

- Senate Bill (SB) 1389
- Renewables Portfolio Standards (RPS)
- California Building Standards (Title 24)
- California Assembly Bill 1493 (AB 1493, Pavley)
- California Air Resources Board (CARB)
- Sustainable Communities Strategy
- California Gas Report
- Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)
- Green New Deal
- Green Building Code

(1) Federal

(a) *Corporate Average Fuel Economy Standards*

First established by 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 U.S. Environmental Protection Agency (USEPA) jointly administer the CAFE standards. Congress has specified that CAFE standards must be set at the “maximum feasible level” with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.¹

Fuel efficiency standards for medium- and heavy-duty trucks have been jointly developed by USEPA 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. USEPA 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.

¹ For more information on the CAFE standards, refer to www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy, accessed December 22, 2020.

(2) State

(a) Senate Bill 1389

Senate Bill (SB) 1389 (Public Resources Code [PRC] Sections 25300–25323) requires the California Energy Commission (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, 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.

(b) California's Renewable Portfolio Standard

First established in 2002 under SB 1078, California's Renewable Portfolio Standards (RPS) require retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020.² The California Public Utilities Commission (CPUC) and the California Energy Commission (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.³ The CEC's responsibilities include: (1) certifying renewable facilities as eligible for the RPS; and (2) designing and implementing a tracking and verification system to ensure that renewable energy output is counted only once for the purpose of the RPS and verifying retail product claims in California or other states.

² CPUC, *California Renewables Portfolio Standard (RPS)*, www.cpuc.ca.gov/RPS_Homepage/, accessed December 22, 2020.

³ CPUC, *California Renewables Portfolio Standard (RPS)*, www.cpuc.ca.gov/RPS_Homepage/, accessed December 22, 2020.

(c) California Building Standards Code (Title 24)

(i) California Building Energy Efficiency Standards (Title 24, Part 6)

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. On May 9, 2018, the CEC adopted the 2019 Title 24 Standards, which went into effect on January 1, 2020. The 2019 standards continue to improve upon the previous (2016) Title 24 standards for new construction of, and additions and alterations to, residential and non-residential buildings.⁴ The 2019 Title 24 standards improve upon the 2016 Title 24 standards for new construction of, and additions and alterations to, residential and nonresidential buildings which 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) 90.1-20173 national standards.⁵

(ii) California Green Building Standards (Title 24, Part 11)

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11) is commonly referred to as the CALGreen Code. The 2019 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.⁶ The CalGreen code is updated regularly and the latest version (2019) became effective on January 1, 2020. The 2019 CALGreen Code improves upon the 2016 CALGreen Code by updating standards for bicycle parking, electric vehicle charging, and water efficiency and conservation. The 2019 CALGreen Code went into effect on January 1, 2020. Refer to Section IV.C, Greenhouse Gas Emissions, of this Draft EIR for additional details regarding these standards.

(d) Assembly Bill 1493/Pavley Regulations

In response to the transportation sector accounting for more than half of California's carbon dioxide (CO₂) emissions, Assembly Bill (AB) 1493 (commonly referred to as the

⁴ CEC, 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, December 2018.

⁵ CEC, 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, December 2018.

⁶ California Building Standards Commission, Guide to the 2019 California Green Building Standards Code Nonresidential, January 2020.

California Air Resources Board's [CARB's] Pavley regulations), enacted on July 22, 2002, requires CARB to set greenhouse gas (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 2009–2016 and Phase II established standards for model years 2017–2025.^{7,8} In March 2020, the United States Department of Transportation and the USEPA issued the SAFE Vehicles Rule, which amends existing CAFE standards (discussed in subsection (1) Federal, above) and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and establishes new standards covering model years 2021 through 2026. Refer to Section C, Greenhouse Gas Emissions, of this Draft EIR for additional details regarding this regulation.

(e) California Air Resources Board

(i) *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.⁹ 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 pollutants and GHG emissions from light- and medium-duty vehicles; and the Zero-Emissions Vehicle regulations (ZEV) to require manufacturers to produce an increasing number of pure ZEVs (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025. In particular, implementation of the ZEV and PHEV regulations reduce transportation fuel consumption by increasing the number of vehicles that are partially or fully electric-powered. Effective November 26, 2019, the federal SAFE Vehicles Rule Part One: One National Program withdraws the California waiver for the GHG and ZEV programs under section 209 of the Clean Air Act, which revokes California's authority to implement the Advanced Clean Cars and ZEV mandates.

⁷ CARB. *Final Regulation Order - Amend sections 1900, 1956.8, 1960.1, 1961, 1961.2, 1961.3, 1962.1, 1962.2, and 1976 , title 13, California Code of Regulations.* December 6, 2012

⁸ USEPA, *EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017–2025 Cars and Light Trucks*, 2012.

⁹ CARB, *California's Greenhouse Gas Vehicle Emission Standards under Assembly Bill 1493 of 2002 (Pavley)*, ww2.arb.ca.gov/californias-greenhouse-gas-vehicle-emission-standards-under-assembly-bill-1493-2002-pavley, accessed December 22, 2020.

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

(iii) In-Use Off-Road Diesel Fueled Fleets Regulation

Because off-road vehicles that are used in construction and other related industries can last 30 years or longer, most of those that are in service today are still part of an older fleet that do not have emission controls. In 2007, CARB approved the “In-Use Off-Road Diesel Fueled Fleets Regulation” to reduce emissions from existing (in-use) off-road diesel vehicles that are used in construction and other industries. This regulation sets an anti-idling limit of five minutes for all off-road vehicles 25 horsepower and up. It also establishes emission rates targets for the off-road vehicles that decline over time to accelerate turnover to newer, cleaner engines and require exhaust retrofits to meet these targets. Revised in October 2016, the regulation enforced off-road restrictions on fleets adding vehicles with older tier engines, and started enforcing beginning July 1, 2014. By each annual compliance deadline, a fleet must demonstrate that it has either met the fleet average target for that year, or has completed the Best Available Control Technology requirements (BACT). Large fleets have compliance deadlines each year from 2014 through 2023, medium fleets each year from 2017 through 2023, and small fleets each year from 2019 through 2028. While the goal of this regulation 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 the use of more fuel-efficient engines.

(g) Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction mandates established in AB 32. SB 375 specifically requires each Metropolitan Planning Organization (MPO) to prepare a “sustainable communities strategy” (SCS) as part of its Regional Transportation Plan (RTP), which is required by the state and federal government, that will achieve GHG emission reduction targets set by CARB for the years 2020 and 2035 by reducing vehicle miles travelled (VMT)

from light duty vehicles through the development of more compact, complete and efficient communities.¹⁰

The Project Site is located within the planning jurisdiction of the Southern California Association of Governments (SCAG). SCAG's first-ever SCS was included in the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (2012–2035 RTP/SCS), which was adopted by SCAG in April 2012. The goals and policies of the SCS that reduce VMT (and result in corresponding decreases in transportation-related fuel consumption) focus on transportation and land use planning that include building infill projects, locating residents closer to where they work and play, and designing communities so there is access to high quality transit service. Specific goals include, actively encourage and create incentives for energy efficiency, where possible (Goal 7) and encourage land use and growth patterns that facilitate transit and active transportation (Goal 8). These goals would serve to reduce transportation fuel usage. SCAG has since adopted the 2016–2040 RTP/SCS¹¹ and the 2020–2045 RTP/SCS.¹² The goals and policies of the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS are substantially the same as those in the 2012–2035 RTP/SCS. See further discussion below.

(3) Regional

(a) *California Gas Report*

The Southern California Gas Company (SoCalGas), along with five other California utility providers released the California Gas Report, presenting a forecast of natural gas supplies and requirements for California through a horizon year. 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, in the latest 2020 California Gas Report, 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, which will displace fossil fuels, including natural gas.¹³

¹⁰ CARB, Sustainable Communities, ww2.arb.ca.gov/our-work/topics/sustainable-communities, accessed December 22, 2020.

¹¹ SCAG, 2016–2040 RTP/SCS, dated April 2016.

¹² SCAG, 2020–2045 RTP/SCS, dated September 2020.

¹³ California Gas and Electric Utilities, 2020 California Gas Report, 2020.

(b) *Southern California Association of Governments RTP/SCS*

As discussed in Section IV.F, Land Use, of this Draft EIR, SCAG's 2016–2040 RTP/SCS presents a long-term transportation vision through the year 2040 for the six-county region of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. On April 7, 2016, the SCAG Regional Council adopted the 2016–2040 RTP/SCS, the mission of which is "leadership, vision and progress which promote economic growth, personal well-being, and livable communities for all Southern Californians."¹⁴ The 2016–2040 RTP/SCS includes land use strategies that focus on urban infill growth and walkable, mixed-use communities in existing urbanized and opportunity areas. More mixed-use, walkable, and urban infill development would be expected to accommodate a higher proportion of growth in more energy-efficient housing types like townhomes, apartments, and smaller single-family homes, as well as more compact commercial building types. Furthermore, the 2016–2040 RTP/SCS includes transportation investments and land use strategies that encourage carpooling, increase transit use, active transportation opportunities, and promoting more walkable and mixed-use communities, which would potentially help to reduce VMT.

On September 1, 2020, SCAG's Regional Council adopted an updated RTP/SCS known as the 2020–2045 RTP/SCS or Connect SoCal.¹⁵ As with the 2016–2040 RTP/SCS, the purpose of the 2020–2045 RTP/SCS is to meet the mobility needs of the six-county SCAG region over the subject planning period through a roadmap identifying sensible ways to expand transportation options, improve air quality and bolster Southern California long-term economic viability.¹⁶ The goals and policies of the 2020–2045 RTP/SCS are similar to, and consistent with, those of the 2016–2040 RTP/SCS. Hence, because the Project would be consistent with the 2016–2020 RTP/SCS as discussed later in this section, the Project would also be consistent with the 2020–2045 RTP/SCS.¹⁷ Because the 2020–2045 RTP/SCS was adopted by SCAG subsequent to both circulation of the Notice of Preparation (NOP) for the Project on August 9, 2019 and approval by LADOT of the Transportation Addendum for the Project on April 27, 2020, this section and the balance of this Draft EIR provides detailed analysis of Project consistency with the 2016–2020 RTP/SCS.

¹⁴ SCAG, 2016–2040 RTP/SCS, April 2016.

¹⁵ SCAG, News Release: SCAG Regional Council Formally Adopts Connect SoCal, September 3, 2020.

¹⁶ SCAG, News Release: SCAG Regional Council Formally Adopts Connect SoCal, September 3, 2020.

¹⁷ For example, the Project would be consistent with both the 2016–2040 RTP/SCS and the 2020–2045 RTP/SCS because it would increase urban density within an HQTA immediately adjacent to a Metro light rail station and in close proximity to more than a dozen bus routes, would include transit-oriented development, and would implement TDM, all of which would reduce the City's per capita VMT and associated air emissions. Another example is that because the Project would be consistent with the City's existing General Plan land use designation and zoning of the Project Site, it has been accounted for in the regional growth projections in both the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS.

The 2016–2040 RTP/SCS also established High-Quality Transit Areas (HQTA), which are described as generally walkable transit villages or corridors that are within 0.5 mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.¹⁸ Local jurisdictions are encouraged to focus housing and employment growth within HQTAs to reduce VMT. The Project Site is located within an HQTA as designated by the 2016–2040 RTP/SCS.¹⁹

(4) Local

(a) L.A.'s Green New Deal

In April 2019, Mayor Eric Garcetti released the Green New Deal, a program of actions designed to create sustainability-based performance targets through 2050 designed to advance economic, environmental, and equity objectives.²⁰ L.A.'s Green New Deal is the first four-year update to the City's first Sustainable City pLAn that was released in 2015 and therefore replaces and supersedes the Sustainable City pLAn.²¹ It augments, expands, and elaborates in more detail L.A.'s vision for a sustainable future and it tackles the climate emergency with accelerated targets and new aggressive goals.

Within the Green New Deal, climate mitigation is one of eight explicit benefits that help define its strategies and goals. These include reducing GHG emissions through near-term outcomes:

- Reduce potable water use per capita by 22.5 percent by 2025; 25 percent by 2035; and maintain or reduce 2035 per capita water use through 2050.
- Reduce building energy use per square feet for all building types 22 percent by 2025; 34 percent by 2035; and 44 percent by 2050 (from a baseline of 68 mBTU/sf in 2015).
- All new buildings will be net zero carbon by 2030 and 100 percent of buildings will be net zero carbon by 2050.
- Increase cumulative new housing unit construction to 150,000 by 2025; and 275,000 units by 2035.

¹⁸ SCAG, 2016–2040 RTP/SCS, p. 8.

¹⁹ SCAG, 2016–2040 RTP/SCS; *Exhibit 5.1: High Quality Transit Areas in the SCAG Region for 2040 Plan*, p. 77.

²⁰ City of Los Angeles, *LA's Green New Deal*, 2019.

²¹ City of Los Angeles, *Sustainable City pLAn*, April 2015.

- Ensure 57 percent of new housing units are built within 1,500 feet of transit by 2025; and 75 percent by 2035.
- Increase the percentage of all trips made by walking, biking, micro-mobility/matched rides or transit to at least 35 percent by 2025, 50 percent by 2035, and maintain at least 50 percent by 2050.
- Reduce VMT per capita by at least 13 percent by 2025; 39 percent by 2035; and 45 percent by 2050.
- Increase the percentage of electric and zero emission vehicles in the city to 25 percent by 2025; 80 percent by 2035; and 100 percent by 2050.
- Increase landfill diversion rate to 90 percent by 2025; 95 percent by 2035 and 100 percent by 2050.
- Reduce municipal solid waste generation per capita by at least 15 percent by 2030, including phasing out single-use plastics by 2028 (from a baseline of 17.85 lbs. of waste generated per capita per day in 2011).
- Eliminate organic waste going to landfill by 2028.
- Reduce urban/rural temperature differential by at least 1.7 degrees by 2025; and 3 degrees by 2035.
- Ensure the proportion of Angelenos living within 1/2 mile of a park or open space is at least 65 percent by 2025; 75 percent by 2035; and 100 percent by 2050.

(b) Green Building Code

On December 11, 2019, the Los Angeles City Council approved Ordinance No. 186,488, which amended Chapter IX, Article 9 of the Los Angeles Municipal Code (LAMC), referred to as the “Los Angeles Green Building Code,” by amending certain provisions of Article 9 to reflect local administrative changes and incorporating by reference portions of the 2019 CALGreen Code. Projects filed on or after January 1, 2020, must comply with the provisions of the Los Angeles Green Building Code. Specific mandatory requirements and elective measures are provided for three categories: (1) low-rise residential buildings; (2) nonresidential and high-rise residential buildings; and (3) additions and alterations to nonresidential and high-rise residential buildings. Article 9, Division 5 includes mandatory measures for newly constructed nonresidential and high-rise residential buildings. Mandatory measures include installation of electrical raceways to future electric vehicle supply equipment (EVSE), reduce water use by 20 percent compared to maximum allowable water use per plumbing fixture as required by the LAMC, and use of roofing material to reduce the heat island effect.

b. Existing Conditions

(1) Electricity

Electricity, 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, including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands.

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 10 100 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.

The Los Angeles Department of Water and Power (LADWP) provides electricity throughout the City of Los Angeles and many areas of the Owens Valley, serving approximately four million people within a service area of approximately 465 square miles, excluding the Owens Valley. Electricity provided by the LADWP is divided into two planning districts: Valley and Metropolitan. The Valley Planning District includes the LADWP service area north of Mulholland Drive, and the Metropolitan Planning District includes the LADWP service area south of Mulholland Drive. The Project Site is located within LADWP's Metropolitan Planning District.

LADWP generates power from a variety of energy sources, including hydropower, coal, gas, nuclear sources, and renewable resources, such as wind, solar, and geothermal sources. According to LADWP's 2017 Power Strategic Long-Term Resources Plan, the LADWP has a net dependable generation capacity greater than 7,531 MW.²² In 2017, the LADWP power system experienced an instantaneous peak demand of 6,432 MW.²³ Approximately 34 percent of LADWP's 2019 electricity purchases were from renewable

²² LADWP, 2017 Power Strategic Long-Term Resources Plan.

²³ LADWP, 2017 Retail Electric Sales and Demand Forecast, p. 6.

sources, which is better than the 32 percent statewide percentage of electricity purchases from renewable sources.²⁴ LADWP's annual electricity sale to customers for the 2016–2017 fiscal year, the most current year for which data is available, was approximately 22,878 million kWh.²⁵

LADWP supplies electrical power to the Project Site from electrical service lines located in the Project vicinity. Existing electricity usage was estimated based on the same methodology contained in the GHG analysis included in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR. Specifically, the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate the existing electricity usage by inputting into the program the size of the land uses, the electrical demand factors for the land uses, electrical intensity factors related to water usage, and the estimated existing vehicle miles traveled (VMT) at the Project Site. It is estimated that existing uses on the Project Site currently consume approximately 229,151 kWh of electricity per year.²⁶

(2) 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, mainly located outside the State, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network, and, therefore, resource availability is typically not an issue. Natural gas provides almost one-third of the state's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel. Natural gas is measured in terms of cubic feet (cf).

Natural gas is provided to the Project Site by the Southern California Gas Company (SoCalGas). SoCalGas is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.8 million customers in more than 500 communities encompassing approximately 24,000 square miles throughout Central and Southern California, from the City of Visalia to the Mexican border.²⁷

²⁴ LADWP, 2019 Power Content Label, October 2020.

²⁵ LADWP, 2017 Retail Electric Sales and Demand Forecast, 2017, p. 14.

²⁶ Eyestone Environmental, Energy Calculations for the Mt. Lebanon Project. See Appendix E to this Draft EIR.

²⁷ SoCalGas, Company Profile, www.socalgas.com/about-us/company-profile, accessed February 24, 2021.

SoCalGas receives gas supplies from several sedimentary basins in the western United States 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.²⁸ The traditional, southwestern United States sources of natural gas will continue to supply most of SoCalGas' natural gas demand. Gas supply available to SoCalGas from California sources averaged 97 million cf per day in 2019 (the most recent year for which data are available).²⁹ SoCalGas supplies natural gas to the Project Site from natural gas service lines located in the Project vicinity.

Existing natural gas usage was estimated based on the same methodology contained in the GHG analysis included in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR. Specifically, the existing natural gas usage is based on the size of the land uses and the natural gas combustion factors for the land uses in units of million British thermal units (MMBtu). It is estimated that existing uses on the Project Site currently consume approximately 331,282 cf of natural gas per year.³⁰

(3) Transportation Energy

According to the United States Energy Information Administration (EIA), transportation accounts for nearly 40 percent of California's total energy consumption in 2018.³¹ In 2018, California consumed 15.6 billion gallons of gasoline and 3.1 billion gallons of diesel fuel.^{32,33} Petroleum-based fuels currently account for 90 percent of California's transportation energy sources.³⁴ However, 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 GHGs from the transportation sector, and reduce 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.³⁵ According

²⁸ California Gas and Electric Utilities, *2020 California Gas Report*, p. 111.

²⁹ California Gas and Electric Utilities, *2020 California Gas Report*, p. 111.

³⁰ Eyestone Environmental, *Energy Calculations for the Mt. Lebanon Project*. See Appendix E to this Draft EIR.

³¹ EIA, California, *Profile Overview*, www.eia.gov/state/?sid=CA#tabs-2, accessed February 24, 2021.

³² California Board of Equalization, *Net Taxable Gasoline Gallons 10-Year Report*.

³³ California Board of Equalization, *Net Taxable Diesel Gallons 10-Year Report*.

³⁴ CEC, *2016–2017 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program*, March 2016.

³⁵ CEC, *2015 Integrated Energy Policy Report*, docketed June 29, 2016, p. 113.

to CARB's EMFAC Web Database, Los Angeles County on-road transportation sources consumed 3.76 billion gallons of gasoline and 1.18 billion gallons of diesel fuel in 2019.³⁶

The existing on-site land uses currently generate a demand for transportation-related fuel use as a result of vehicle trips to and from the Project Site. The estimate of annual VMT associated with the existing Project Site uses is 321,811 VMT per year.³⁷ This translates to 12,611 gallons of gasoline and 2,117 gallons of diesel per year.³⁸ As discussed in Section IV.I, Transportation, of this Draft EIR, persons traveling to and from the Project Site also have the option of using public transportation to reduce transportation-related fuel use. Specifically, multiple Metro bus lines are located within 0.25 mile of the Project Site, as well as the DASH, West Hollywood CityLine, and Antelope Valley Transportation Authority (AVTA) lines. For further discussion of public transit lines that serve the Project area, refer to Section IV.I, Transportation, of this Draft EIR.

3. Project Impacts

a. Thresholds of Significance

In accordance with Appendix G to the CEQA Guidelines, the Project would have a significant impact related to energy if it would:

Threshold (a): Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Threshold (b): Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

With regard to Threshold (a), this analysis relates to Appendix F to the CEQA Guidelines, prepared in response to the requirement in PRC Section 21100(b)(3) that an EIR shall include a detailed statement setting forth “[m]itigation measures proposed to minimize significant effects of the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy.”

³⁶ CARB, EMFAC2014 Web Database.

³⁷ Eyestone Environmental, *Energy Calculations for the Mt. Lebanon Project*, See Appendix E to this Draft EIR.

³⁸ The annual gasoline and diesel usage per year was determined by taking the VMT (321,811 miles), multiplying the VMT by the percent fleet mix for gasoline (93.8 percent) and diesel (6.2 percent), and dividing the outcome by the estimated miles per gallon in 2019 for gasoline (23.9 miles per gallon) and diesel (9.5 miles per gallon). See Appendix E to this Draft EIR.

In addition, with regard to potential energy impacts, the *L.A. CEQA Thresholds Guide* states that a determination of significance shall consider the following factor³⁹:

- The degree to which the project design and/or operations incorporate energy-conservation measures, particularly those that go beyond City requirements.

In accordance with Appendix F and the *L.A. CEQA Thresholds Guide*, the following factors will be considered in determining whether the Project would have a significant impact with regard to Threshold (a):

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

With regard to Threshold (b), the Project will be evaluated for consistency with adopted energy conservation plans and policies relevant to the Project. Such adopted energy conservation plans and policies include Title 24 energy efficiency requirements, CalGreen Code, and City building codes. Also, as discussed in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR, the Project would also be consistent with the SCAG 2016–2040 RTP/SCS, which includes goals to reduce VMT and corresponding decrease in fuel consumption.

³⁹ L.A. CEQA Thresholds Guide factors related to infrastructure are evaluated in Section IV.K.2, Utilities and Service Systems—Energy Infrastructure, of this Draft EIR.

In accordance with Appendix F and the *L.A. CEQA Thresholds Guide*, the following factor will be considered in determining whether the Project would have a significant impact with regard to Threshold (b):

1. Whether the Project conflicts with adopted energy conservation plans.

b. Methodology

(1) Construction

During Project construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control (including supply and conveyance) and, on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. Electricity usage associated with the supply and conveyance of water used for dust control during construction was calculated using CalEEMod.⁴⁰ Electricity used to power lighting, electronic equipment, and other construction activities necessitating electrical power was calculated based on data provided in South Coast Air Quality Management District (SCAQMD) construction surveys (i.e., construction activity, horsepower, load factor, and hours of use per day).⁴¹ The SCAQMD construction surveys identified the use of diesel generators to supply construction sites with electrical power. During construction activities, SCAQMD recommends use of electricity from power poles rather than temporary diesel or gasoline generators.⁴² Consistent with AIR-PDF-1, electricity from power poles rather than diesel or gasoline generators will be used during construction where feasible.

In terms of natural gas, construction activities typically do not involve the consumption of natural gas.

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 worker travel to and from the Project Site, and delivery and haul truck trips (e.g., the hauling of demolition material to offsite reuse and disposal facilities). Fuel consumption from onsite, heavy-duty construction equipment was calculated based on the equipment mix and usage factors provided in the CalEEMod construction output files included in Appendix E to this Draft EIR. The total horsepower was then multiplied by fuel usage estimates per horsepower-hour included in Table A9-3-E of the SCAQMD *CEQA Air*

⁴⁰ California Air Pollution Control Officers Association, *CalEEMod™ version 2016.3.2 User's Guide*, November 2017.

⁴¹ *CalEEMod Users Guide. Appendix E1, Technical Source Documentation*. October 2017.

⁴² SCAQMD, *CEQA Air Quality Handbook*, Table 11-3. 1993

Quality Handbook. Fuel consumption from construction worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances provided in the CalEEMod construction output files. Total VMT was then calculated for each type of construction-related trip and divided by the corresponding county-specific miles-per-gallon factor using CARB's EMFAC 2014 model (EMFAC2014). EMFAC provides the total annual VMT and fuel consumed for each vehicle type. Consistent with CalEEMod, construction worker trips were assumed to include 50-percent light duty gasoline auto and 50-percent light duty gasoline trucks. Construction vendor and delivery/haul trucks were assumed to be heavy-duty diesel trucks. Refer to Appendix E to this Draft EIR for detailed calculations.

(2) Operation

Annual consumption of electricity (including electricity usage associated with the supply and conveyance of water) and natural gas was calculated using demand factors provided in CalEEMod as part of the GHG analysis included in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR. As mentioned above, electricity usage and natural gas consumption is calculated based on default energy demand factors contained within CalEEMod for the Project land uses. Electricity from water usage is also based on CalEEMod electricity intensity factors related to water treatment and conveyance.

Energy impacts associated with transportation during operation were also assessed. Daily trip generation used in this analysis was based on the *Our Lady of Mt. Lebanon Project Traffic Impact Study Addendum* (Transportation Addendum), prepared by Linscott, Law and Greenspan (See Appendix T to this Draft EIR). As discussed therein, Project-related VMT was calculated using the LADOT VMT Calculator. The VMT Calculator was developed by the City and LADOT to comply with SB 743, which requires lead agencies to adopt VMT criteria to determine transportation related impacts. Weekend project trips were based on the Institute of Transportation Engineers trip generation factors for the applicable land uses. The daily Project-related VMT were then input into CalEEMod, which calculated the annual VMT. The resulting annual VMT was used as part of the GHG analysis included in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR. Based on this annual VMT, gasoline and diesel consumption rates were calculated using the county-specific miles per gallon calculated using EMFAC2014. The vehicle fleet mix for vehicles anticipated to visit the Project Site was calculated consistent with the CalEEMod default for Los Angeles County. Supporting calculations are provided in Appendix E to this Draft EIR. These calculations were used to determine if the Project would cause the wasteful, inefficient and/or unnecessary consumption of energy as required by Appendix F guidelines.

The Project's estimated energy demands were also analyzed relative to LADWP's and SoCalGas' existing and planned energy supplies in 2024 (i.e., the Project buildout year) to determine if these two energy utility companies would be able to meet the Project's energy demands. Finally, the capacity of local infrastructure to accommodate the Project's

estimated electricity and natural gas demand was assessed based on the Energy Utility Report, included as Appendix F to this Draft EIR.

c. Project Design Features

The Project includes project design features designed to improve energy efficiency as set forth in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR, including Project Design Features GHG-PDF-1 and GHG-PDF-2 and Section IV.K.1, Utilities and Service Systems—Water Supply and Infrastructure, of this Draft EIR, including Project Design Feature WAT-PDF-1.

d. Analysis of Project Impacts

Threshold (a): Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

(1) Impact Analysis

The following analysis considers the seven factors in the Thresholds of Significance subsection above to determine whether Threshold (a) would be exceeded.

- (a) *The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed.*

As discussed above, the Project would consume energy during construction and operational activities. Sources of energy for these activities would include electricity usage, natural gas consumption (during operation only), and transportation fuels such as diesel and gasoline. The analysis below includes the Project's energy requirements and energy use efficiencies by fuel type for each stage of the Project (construction, operations, maintenance and removal activities).⁴³

For purposes of this analysis, Project maintenance would include activities such as repair of structures, landscaping and architectural coatings, which could potentially use electricity and petroleum-based fuels. Energy usage related to Project maintenance activities are assumed to be included as part of Project operations. Project removal activities would include demolition of the proposed buildings following their construction

⁴³ Removal activities relate to the life of a project.

and/or abandonment of the Project Site. However, it is not known when the Project would be removed. Therefore, analysis of energy usage related to Project removal activities are too speculative for evaluation. For this reason, impacts related to the energy usage of the removal or abandonment of the Project were not analyzed.

(i) *Construction*

During Project construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control and, on a limited basis, powering lights, electric equipment, or other construction activities necessitating electrical power. Electricity from these construction activities would be limited in comparison to existing operational electricity usage at the Project Site given that construction activities would be intermittent and temporary. As discussed below, construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. 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 worker travel to and from the Project Site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities).

As shown in Table IV.D-1 on page IV.D-20, a total of 28,036 kWh of electricity, 59,639 gallons of gasoline, and 174,301 gallons of diesel are estimated to be consumed during Project construction. Project construction is expected to start in 2021 and be completed in 2024.

Electricity

During construction of the Project, electricity would be consumed to supply and convey water for dust control and, on a limited basis, may be used to power lighting, electronic equipment, and other construction activities necessitating electrical power. Electricity would be supplied to the Project Site by LADWP and would be obtained from the existing electrical lines that connect to the Project Site. This is consistent with suggested measures in the *L.A. CEQA Thresholds Guide* to use electricity from power poles rather than temporary gasoline or diesel powered generators.

As shown in Table IV.D-1, a total of approximately 28,036 kWh of electricity are anticipated to be consumed during Project construction. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed, with the demolition and grading phases having the greatest demand, and would cease upon completion of construction. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. In addition, although Title 24 requirements typically apply to energy usage for buildings, long-term construction lighting (longer than 120 days) providing illumination for the Project

Table IV.D-1
Summary of Energy Use During Project Construction^a

Fuel Type	Quantity
Electricity	
Water Consumption	3,945 kWh
Lighting, Electric Equipment, and Other Construction Activities Necessitating Electrical Power ^b	24,091 kWh
Total Electricity^c	28,036 kWh
Gasoline	
On-Road Construction Equipment	59,639 gallons
Off-Road Construction Equipment	0 gallons
Total Gasoline	59,639 gallons
Diesel	
On-Road Construction Equipment	95,129 gallons
Off-Road Construction Equipment	79,172 gallons
Total Diesel	174,301 gallons
<i>kWh = kilowatt hours</i>	
^a Detailed calculations are provided in Appendix E to this Draft EIR.	
^b Electricity usage is based on SCAQMD construction site survey data and typical requirements for power generators. Such electricity demand would be temporary, limited, and would cease upon the completion of construction.	
^c Total construction electricity usage of 28,036 kWh represents approximately 12 percent of the 229,151 kWh existing annual operational electricity usage.	
Source: Eyestone Environmental, 2020.	

Site and staging areas would also comply with applicable Title 24 requirements which includes limits on the wattage allowed per specific area, which result in the conservation of energy.⁴⁴ As such, the demand for electricity during construction would not cause wasteful, inefficient, and unnecessary use of energy.

Natural Gas

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be supplied to support Project construction activities; thus there would be no demand generated by construction. Furthermore, the existing natural gas usage at the Project Site of approximately 331,282 cf per year would no longer be required because the existing

⁴⁴ California Building Energy Efficiency Standards, Title 24, Part 6, §110.9, §130.0, and §130.2.

buildings would be demolished or deconstructed. As such, the energy requirements and energy use of the Project related to natural gas during construction would be less than existing conditions and would not cause wasteful, inefficient, and unnecessary use of energy, and impacts would be less than significant.

Transportation Energy

The petroleum-based fuel use summary provided in Table IV.D-1 on page IV.D-20 represents the amount of transportation energy that could potentially be consumed during Project construction based on a conservative set of assumptions, provided in Appendix E to this Draft EIR. The construction energy analysis assumes that all equipment would be operating continuously (eight hours per day) throughout the entire duration of construction. However, under real world typical conditions, most equipment would be operating less than eight hours per day. As shown, on- and off-road vehicles would consume an estimated 59,639 gallons of gasoline and approximately 174,301 gallons of diesel fuel for the Project's construction. The temporary construction-period fuel consumption would also be offset by temporary removal of existing uses, approximately 12,611 gallons of gasoline and 2,117 gallons of diesel per year, thereby reducing the net temporary increase in consumption.

Moreover, trucks and equipment used during proposed construction activities would comply with CARB's anti-idling regulations as well as the In-Use Off-Road Diesel-Fueled Fleets regulation. In addition to reducing criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in efficient use of construction-related energy and reduce fuel consumption. In addition, on-road vehicles (i.e., haul trucks, worker vehicles) would be subject to Federal fuel efficiency requirements. Therefore, Project construction activities would comply with existing energy standards with regard to transportation fuel consumption. As such, the demand for petroleum-based fuel during construction would not cause wasteful, inefficient, and unnecessary use of energy.

Construction Materials

The energy analysis does not include a full life cycle analysis of energy usage that would occur over the production/transport of materials used during the construction of the project or used during the operational life of the project, or the end of life for the materials and processes that would occur as an indirect result of the project. Estimating the energy usage associated with these processes would be too speculative for meaningful consideration, would require analysis beyond the current state-of-the-art in impact assessment, and may lead to a false or misleading level of precision in reporting. Manufacture and transport of materials related to Project construction and operation is expected to be regulated under regulatory energy efficiency requirements. Therefore, it is assumed that energy usage related to construction and operational materials would be

consistent with current regulatory requirements regarding energy usage, and therefore not wasteful, inefficient or unnecessary.

(ii) Operation

During operation of the Project, energy would be consumed for multiple purposes, including, but not limited to, the following: heating/ventilating/air conditioning (HVAC); refrigeration; lighting; and the use of electronics, equipment, and machinery. Energy would also be consumed during Project operations related to water usage, solid waste disposal, and vehicle trips. The Project includes demolition of the existing office and church buildings on the Project Site, which currently consume electricity and natural gas and generate vehicle trips. Although energy usage credit may be taken for removal of existing uses, it was conservatively assumed that the newly constructed buildings and associated energy usage would be considered net new without including credits for the existing buildings. As shown in Table IV.D-2 on page IV.D-23, the Project's net new energy demand would be approximately 1,378,556 kWh of electricity per year and 1,647,341 cf of natural gas per year. The Project would also result in a net increase of 47,443 gallons of gasoline per year and 9,058 gallons of diesel fuel per year consumed.

Electricity

As shown in Table IV.D-2, with compliance with Title 24 standards and applicable CALGreen Code requirements, buildup of the Project would result in a projected net increase in the on-site demand for electricity totaling approximately 1,378,556 kWh per year. In addition to complying with CALGreen Code, the Applicant would also implement GHG-PDF-1 in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR, which states that the design of new buildings would incorporate sustainability features (e.g., Energy Star-labeled products), and Project Design Feature WAT-PDF-1, presented in Section IV.K.1, Utilities and Service Systems—Water Supply and Infrastructure, of this Draft EIR, which states that the Project would incorporate water conservation features, such as high-efficiency toilets with flush volume of 1.0 gallon of water per flush, showerheads with a flow rate of 1.5 gallons per minute or less, and drip/subsurface irrigation, among others. These measures would further reduce the Project's energy demand. In addition, the Project would be subject to the 2019 Title 24 standards, which represent "challenging but achievable design and construction practices" that represent "a major step towards meeting the ZNE goal." Residential and nonresidential buildings built in compliance with the 2019 standards use about 30 to 53 percent less energy than those under the 2016 standards.⁴⁵ This analysis conservatively includes a 10-percent reduction in the CalEEMod calculated energy use to account for compliance with 2019 Title 24 standards.

⁴⁵ CEC, 2019 Building Energy Efficiency Standards, Fact Sheet.

Table IV.D-2
Summary of Annual Net New Energy Use During Project Operation^a

Source	Estimated Energy Demand	
	Operation (Buildout)	Existing
Electricity		
Building	1,194,714 kWh	213,320 kWh
Water ^b	159,729 kWh	15,831 kWh
EV Chargers ^c	24,114 kWh	0 kWh
Total Electricity^d	1,378,556 kWh	229,151 kWh
Natural Gas		
Building	1,647,341 cf	331,282 kWh
Natural Gas Fireplaces^d	0 cf	0 cf
Total Natural Gas^d	1,647,341 cf	331,282 kWh
Transportation (On-Road Vehicles and Off-Road Equipment)		
Gasoline	47,443 gal	10,873 gal
Diesel	9,058 gal	2,076 gal
Total Transportation^e	56,501 gal	12,949 gal

cf = cubic feet
gal = gallons
kWh = thousand kilowatt hours

^a Detailed calculations are provided in Appendix E to this Draft EIR. Totals may not precisely add up due to rounding.

^b Calculations assume compliance with Project Design Feature GHG-PDF-1 provided in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR and Project Design Feature WAT-PDF-1 provided in Section IV.K.1, Utilities and Service System—Water Supply and Infrastructure.

^c As discussed in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR, the Project would provide at least 30 percent of Code-required parking spaces with the capability of supporting electric vehicle supply equipment (EVSE) and that a minimum of 10 percent of Code-required parking spaces would be further equipped with EV charging stations consistent with City building codes.

^d Electricity and natural gas estimates assume compliance with applicable CALGreen requirements and implementation of GHG-PDF-1 and GHG-PDF-2, in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR. GHG-PDF-1 assumes use of light emitting diodes (LED) lighting which will reduce lighting energy usage by 25%. Natural gas fireplaces would not be permitted under GHG-PDF-2.

^e Transportation fuel estimates include project characteristics consistent with CAPCOA guidance measures. Fuel estimates conservatively do not include reductions in fuel usage associated with installation of EV chargers as required by City building codes

Source: Eyestone Environmental, 2020.

LADWP is required to procure at least 33 percent of their energy portfolio from renewable sources by 2020. The current sources procured by LADWP include wind, solar, and geothermal sources. These sources account for 34 percent of LADWP's overall

energy mix in 2019, the most recent year for which data are available.⁴⁶ This represents the available offsite renewable sources of energy that would meet the Project's energy demand. The use of renewable energy would indirectly reduce use of fossil fuels required for electricity generation (natural gas, coal, oil). While the electricity usage rate for a given land use would not be directly affected by the availability of renewable energy, the consumption of fossil fuels required for electricity generation would be reduced.

In addition, the Project would comply with Section 110.10 of Title 24, which includes mandatory requirements for solar-ready buildings, and, as such, would not preclude the potential use of alternate fuels.

Based on LADWP's 2017 Power Strategic Long-Term Resources Plan, LADWP forecasts that its total energy sales in the 2024–2025 fiscal year (the Project's buildout year) will be 23,286 GWh of electricity.^{47,48} As such, the Project-related net increase in annual electricity consumption of 1,378,556 kWh per year would represent less than 0.006 percent of LADWP's projected sales in 2024. In addition, as previously described, the Project would incorporate a variety of energy conservation measures to reduce energy usage.

Natural Gas

As provided in Table IV.D-2 on page IV.D-23, the buildout of the Project is projected to generate a net increase in the on-site demand for natural gas totaling approximately 1,647,341 cf per year, assuming compliance with Title 24 standards and applicable CALGreen Code requirements. As discussed above, in addition to complying with applicable regulatory requirements regarding energy conservation (e.g., California Building Energy Efficiency Standards and CALGreen Code), the Project would implement project design features to further reduce energy use. Specifically, the Applicant would implement GHG-PDF-1 in Section IV.C, Greenhouse Gas Emissions, to this Draft EIR, which states that the design of new buildings would incorporate sustainability features (e.g., Energy Star-labeled products). As discussed above, the Project would be subject to the 2019 Title 24 standards which represent "challenging but achievable design and construction practices". However, CalEEMod default energy usage factors are based on 2016 Title 24 standards. This analysis conservatively includes a 10-percent reduction in the CalEEMod default (2016 Title 24) calculated energy use to account for compliance with 2019 Title 24 standards. In order to meet the Title 24 energy performance requirement, the Project may

⁴⁶ LADWP 2019 Power Content Label, October 2020.

⁴⁷ LADWP defines its future electricity supplies in terms of sales that will be realized at the meter.

⁴⁸ LADWP, 2017 Power Strategic Long-Term Resources Plan, Appendix A, Table A-1.

include use of efficient water heaters, cooking equipment and other major support appliances. The Applicant would also implement GHG-PDF-2 which prohibits natural gas fireplaces within residential uses.

As stated above, the Project's estimated net increase in demand for natural gas is 1,647,341 cf per year, or approximately 4,513 cf per day. Based on the 2020 California Gas Report, the California Energy and Electric Utilities estimates natural gas consumption within SoCalGas' planning area will be approximately 2.48 billion cf/day in 2024 (the Project's buildout year).⁴⁹ The Project would account for approximately 0.0002 percent of the 2024 forecasted consumption in SoCalGas' planning area. In addition, as also previously described, the Project would incorporate a variety of energy conservation measures to reduce energy usage.

Transportation Energy

During operation, Project-related traffic would result in the consumption of petroleum-based fuels related to vehicular travel to and from the Project Site. As noted above, the Project Site is located in an HQTA designated by SCAG, which indicates that the Project Site is an appropriate site for increased density and employment opportunities from a "smart growth," regional planning perspective.⁵⁰ As discussed in Section IV.I, Transportation, of this Draft EIR, multiple Metro bus lines are located within 0.25 mile of the site, as well as the DASH, West Hollywood CityLine, and AVTA lines. These mass transit lines would provide service within the Project vicinity and would provide employees, residents, and guests with various public transportation opportunities. In accordance with the LAMC, the Project would provide the requisite number of bicycle parking spaces.

Previously, trip generation for land uses was calculated based on survey data collected by the Institute of Transportation Engineers (ITE). However, these ITE trip generation rates were based on data collected at suburban, single-use, free standing sites, which may not be representative of urban mixed-use environments. Beginning in 2019, the USEPA has sponsored a study to collect travel survey data from mixed-use developments in order provide a more representative trip generation rate for multi-use sites. Results of

⁴⁹ California Gas and Electric Utilities, 2020 California Gas Report, p. 146.

⁵⁰ The City's ZIMAS also identifies a portion of the Project Site as located in a transit priority area. PRC Section 21099 defines a "transit priority area" as an area within 0.5 miles of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." PRC Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods."

the USEPA survey indicate that trip generation and VMT are affected by factors such as resident and job density, availability of transit, and accessibility of biking and walking paths. Based on these factors, the USEPA has developed equations known as the EPA Mixed-Use Development (MXD) model to calculate trip reductions for multi-use developments.⁵¹ The LADOT VMT Calculator incorporates the USEPA MXD model and accounts for project features such as increased density and proximity to transit, which would reduce VMT and associated fuel usage in comparison to free-standing sites. Furthermore, as discussed in Section IV.I, Transportation, of this Draft EIR, the Project would also implement VMT reduction measures to further reduce vehicle trips and associated energy usage, including unbundled parking, promotions and marketing, bicycle parking consistent with Section 12.21 A.16(a)(1)(i) of the LAMC, and pedestrian network improvements. As such, the Project's siting would minimize transportation fuel consumption through the reduction of VMT, as described above and discussed further in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR. With incorporation of these trip reduction measures, net transportation-fuel usage would be reduced by 47 percent for both gasoline and diesel fuels.

As summarized in Table IV.D-2 on page IV.D-23, when accounting for the measures that would be implemented to reduce VMT, the Project's estimated petroleum-based fuel usage would result in an increase of 47,443 gallons of gasoline and 9,058 gallons of diesel per year, or a total of 56,501 gallons of petroleum-based fuels annually.

(iii) Summary of Energy Requirements and Energy Use Efficiencies

As previously discussed, CEQA Guidelines Appendix F recommends quantification of a project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project's life cycle including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed. The Project's energy requirements were calculated based on the methodology contained in CalEEMod for electricity and natural gas usage. Project VMT data were calculated based on CAPCOA guidelines. The calculations also took into account energy efficiency measures such as Title 24, CalGreen Code, and vehicle fuel economy standards. Table IV.D-1 and Table IV.D-2 on pages IV.D-20 and IV.D-23, respectively, provide a summary of Project construction and operational energy usage, respectively. During Project construction activities, a total of 28,036 kWh of electricity would be consumed along with 233,939 gallons of transportation fuel (gasoline and diesel). During Project operations, a net total of 1,378,556 kWh of electricity, 1,647,341 cf of natural gas would be consumed on an annual basis. The Project would also result in a net increase of

⁵¹ USEPA, *Mixed-Use Trip Generation Model*, www.epa.gov/smartgrowth/mixed-use-trip-generation-model, accessed February 24, 2021.

56,501 gallons of transportation fuel consumption. When accounting for project design features and increased energy efficiency measures, operational electricity usage would be reduced by 10 percent, natural gas usage reduced by 5 percent when compared to a project without energy efficiency measures. Transportation fuel usage would be reduced by 47 percent compared to the Project without trip reduction features. Details are provided in Appendix E to this Draft EIR.

(b) *The effects of the project on local and regional energy supplies and on requirements for additional capacity*

(i) *Construction*

As discussed above, electricity would be intermittently consumed during the conveyance of the water used to control fugitive dust, as well as to provide electricity for temporary lighting and other general construction activities. The 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. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. The estimated construction electricity usage represents approximately 2 percent of the estimated net annual operational demand which, as discussed below, would be within the supply and infrastructure service capabilities of LADWP.⁵² Furthermore, the electricity demand during construction would be offset with the temporary removal of the existing onsite uses which currently generate a demand for electricity. Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be required for Project construction activities, resulting in a net decrease when compared to existing operations. Transportation fuel usage during Project construction activities would represent approximately 0.001 percent of gasoline usage and 0.02 percent of diesel usage within Los Angeles County, respectively. As energy consumption during Project construction activities would be relatively negligible, the Project would not materially affect local and regional energy supplies during the construction period or require additional capacity.

(ii) *Operation*

Based on LADWP's 2017 Power Strategic Long-Term Resources Plan, LADWP forecasts that its total energy sales in the 2024–2025 fiscal year (the Project's buildout

⁵² The percentage is derived by taking the total amount of electricity usage during construction (28,036 kWh) and dividing that number by the total amount of net electricity usage during operation (1,378,556 kWh) to arrive at 2 percent.

year) will be 23,286 GWh of electricity.^{53,54} As such, the Project-related net operational increase in annual electricity consumption of 1,378,556 kWh per year would represent less than 0.006 percent of LADWP's projected sales in 2024.⁵⁵ Furthermore, LADWP has confirmed that the Project's operational electricity demand can be served by the facilities in the Project area.⁵⁶ Therefore, it is anticipated that LADWP's existing and planned electricity capacity and electricity supplies would be sufficient to support the Project's operational electricity demand.

As stated above, the Project's estimated net increase in operational demand for natural gas is 1,647,341 cf per year, or approximately 4,513 cf per day. Based on the 2020 California Gas Report, the California Energy and Electric Utilities estimated natural gas consumption within SoCalGas' planning area will be approximately 2.48 billion cf/day in 2024 (the Project's buildout year).⁵⁷ The Project would account for approximately 0.0002 percent of the 2024 forecasted consumption in SoCalGas' planning area.

At buildout, the operation of the Project would result in a net increase of 47,443 gallons of gasoline and 9,058 gallons of diesel per year, or a total of 56,501 gallons of petroleum-based fuels consumed per year, as shown in Appendix E to this Draft EIR.

In sum, energy consumption during Project operations would not materially affect LADWP's and SoCalGas' energy supplies or requirements for additional capacity.

(c) The effects of the project on peak and base period demands for electricity and other forms of energy

As discussed above, the electricity demand, natural gas consumption, and transportation energy consumption would be well within the available regional supplies and overall capacity of LADWP, SoCalGas, and California refineries, respectively. The proposed Project's energy demand and consumption are negligible compared to available supplies during both construction and operation.

Electricity demand during construction and operation of the Project would have a negligible effect on the overall capacity of LADWP's power grid and base load conditions.

⁵³ LADWP defines its future electricity supplies in terms of sales that will be realized at the meter.

⁵⁴ LADWP, 2017 Power Strategic Long-Term Resources Plan, Appendix A, Table A-1.

⁵⁵ LADWP, 2017 Power Strategic Long-Term Resources Plan, December 2017, Appendix A.

⁵⁶ KPFF Consulting Engineers, Our Lady of Mt. Lebanon Project Utility Infrastructure Technical Report, May 4, 2020. Refer to Appendix F to this Draft EIR.

⁵⁷ California Gas and Electric Utilities, 2020 California Gas Report p. 146.

With regard to peak load conditions, the LADWP power system experienced an all time high peak of 6,432 MW on August 31, 2017.⁵⁸ LADWP also estimates a peak load based on two years of data known as base case peak demand to account for typical peak conditions. Based on LADWP estimates for 2017, the most current year for which data is available, the base case peak demand for the power grid is 5,854 MW.⁵⁹ The Project would consume 281 kW during peak load conditions.⁶⁰ In comparison to the LADWP power grid base peak load of 5,854 MW in 2017, the Project's electricity demand would represent approximately 0.005 percent of the LADWP base peak load conditions. In addition, LADWP's annual growth projection in peak demand of the electrical power grid of 0.4 percent would be sufficient to account for future electrical demand by the Project.⁶¹ Therefore, Project electricity consumption during operational activities would have a negligible effect on peak load conditions of the power grid.

With regard to peak day natural gas demand, the 2020 California Gas Report estimates for 2024 (i.e., the Project's first operational year), the extreme peak demand for the SoCalGas service area is 2,480 million cf/day. Under peak conditions, the Project would consume approximately 137,278 cf/month which would result in approximately 4,513 cf per day. By conservatively assuming three months (90 days) of active natural gas demand per day during the winter months, demand would be equivalent to approximately 18,303 cf per day (conservatively assuming natural gas would occur during the winter months only). In comparison to the CEC extreme peak day demand of 2,480 million cf for 2024, based on the assumption above, the Project would represent 0.0006 percent of SoCalGas' forecasted extreme peak day demand. Therefore, Project natural gas demand during operational activities would have a negligible effect on peak demands of the natural gas supplies.

The electricity and natural gas energy supplies would be sufficient to serve the Project's peak energy demand. Thus, the Project's electricity and natural gas demand during operational activities would have a negligible effect on demand during peak and base load periods of the power grid and on the natural gas supplies, and impacts would be less than significant.

⁵⁸ LADWP, 2017 Retail Electric Sales and Demand Forecast. p. 6.

⁵⁹ LADWP, 2017 Retail Electric Sales and Demand Forecast. p. 6.

⁶⁰ Eyestone Environmental, Energy Calculations for the Mt. Lebanon Project. See Appendix E to this Draft EIR.

⁶¹ LADWP, 2017 Retail Electric Sales and Demand Forecast. p. 6.

(d) *The degree to which the project complies with existing energy standards*

Although Title 24 requirements typically apply to energy usage for buildings, long-term construction lighting (greater than 120 days) providing illumination for the Project Site and staging areas would also comply with applicable Title 24 requirements (includes limits on the wattage allowed per specific area). In addition, construction equipment would comply with energy efficiency requirements contained in the Federal Energy Independence and Security Act or previous Energy Policy Acts for electrical motors and equipment.⁶² Electricity and Natural Gas usage during Project operations presented in Table IV.D-2 on page IV.D-23 would comply with Title 24 standards and applicable CalGreen and Los Angeles Green Building Code requirements. Therefore, Project construction and operational activities would comply with existing energy standards with regards to electricity and natural gas usage.

With regard to transportation fuels, trucks, and equipment used during construction activities, the Project would comply with CARB's anti-idling regulations, as well as the In-Use Off-Road Diesel-Fueled Fleets regulation. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in efficient use of construction-related energy. During Project operations, vehicles travelling to and from the Project Site are assumed to comply with CAFE fuel economy 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 CAFE standards, as required.

Based on the above, Project construction and operational activities would comply with existing energy standards with regards to electricity and natural gas usage, as well as transportation fuel consumption.

(e) *Effects of the Project on Energy Resources*

As discussed above, LADWP's electricity generation is derived from a mix of non-renewable and renewable sources such as coal, natural gas, solar, geothermal wind and hydropower. The LADWP's most recently adopted 2017 Power Strategic Long-Term Resources Plan identifies adequate resources (natural gas, coal) to support future generation capacity.

Natural gas supplied to the Southern California is mainly sourced from out of state with a small portion originating in California. Sources of natural gas for the Southern California region are obtained from locations throughout the western United States as well

⁶² Energy Independence and Security Act of 2007. Pub.L. 110-140.

as Canada.⁶³ According to the (EIA, the United States currently has over 80 years of natural gas reserves based on 2015 consumption.⁶⁴ Compliance with energy standards is expected to result in more efficient use of natural gas (lower consumption) in future years. Therefore, Project construction and operation activities would have a negligible effect on natural gas supply.

With regard to on-site energy resources, the Project Site does not contain any significant sources of renewable (i.e., water, solar, wind, geothermal) or non-renewable energy, such as coal, natural gas, petroleum. In addition, the Project would not generate power using non-renewable sources or associated energy transmission lines. Therefore, the Project construction and operation activities would not conflict with existing or planned energy resources.

Transportation fuels (gasoline and diesel) are produced from crude oil which is imported from various regions around the world. Based on current proven reserves, crude oil production would be sufficient to meet over 50 years of consumption.⁶⁵ The Project would also comply with CAFE fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). The Project would also include adequate alternative modes of transportation by providing bicycle parking spaces and preferred parking for fuel efficient vehicles, resulting in a reduction of transportation fuel usage. Therefore, Project construction and operation activities would have a negligible effect on the transportation fuel supply.

As discussed above in Subsection 2.a, Regulatory Framework, one of the objectives of SB 350 is to increase procurement of California's electricity from renewable sources from 33 percent to 50 percent by 2030. However, as of September 2018, SB 100 was signed, which would require retail sellers of electric services to increase procurement from eligible renewable energy resources to 50 percent renewable resources target by December 31, 2026, and 60 percent by December 31, 2030. Accordingly, LADWP is required to procure at least 60 percent of their energy portfolio from renewable sources by 2030. The current sources of renewable energy procured by LADWP include wind, solar, and geothermal sources. These sources account for 34 percent of LADWP's overall energy mix in 2019, the most recent year for which data are available.⁶⁶ This represents

⁶³ California Gas and Electric Utilities, 2020 California Gas Report.

⁶⁴ EIA, Frequently Asked Questions, www.eia.gov/tools/faqs/faq.php?id=58&t=8, accessed February 24, 2021.

⁶⁵ BP Global, Oil Reserves, www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/oil/oil-reserves.html, accessed February 24, 2021.

⁶⁶ LADWP, 2019 Power Content Label, October 2020.

the available offsite renewable sources of energy that would meet the Project's energy demand. The Project's use of renewable energy would indirectly reduce use of fuels required for electricity generation (natural gas, coal, oil). While the Project's electricity usage rate would not be directly affected by the availability of renewable energy, the Project's usage of renewable energy would indirectly avoid consumption of fossil fuels.

With regard to on-site renewable energy sources, as discussed in Section II, Project Description, of this Draft EIR, the Project would comply with Title 24 requirements for "Solar Ready Buildings," which requires a certain area of rooftop to be set aside for installation of solar panels. For the Project, 1,380 square feet would be set aside to meet this requirement. However, due to the Project Site's location, other on-site renewable energy sources would not be feasible to install onsite as there are no local sources of energy from the following sources: biodiesel, biomass hydroelectric and small hydroelectric, digester gas, methane, fuel cells, landfill gas, municipal solid waste, ocean thermal, ocean wave, and tidal current technologies, or multi-fuel facilities using renewable fuels. Furthermore, wind-powered energy is not viable on the Project Site due to the lack of sufficient wind in the Los Angeles basin. Specifically, based on a map of California's wind resource potential, the Project Site is not identified as an area with wind resource potential.⁶⁷ Therefore, the Project would not affect energy resources.

(f) The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives

The Project's proximity to retail uses would allow for more residents to live closer to shopping areas, reducing the VMT. The project design, which includes dedicated bicycle parking facilities and an improved streetscape with pedestrian amenities, also encourages non-automotive forms of transportation such as walking or biking to destinations. In addition, multiple Metro bus lines are located within 0.25 mile of the Project Site, as well as the DASH, West Hollywood CityLine, and AVTA lines. These mass transit lines would provide service within the Project vicinity and would provide employees, residents, and guests with various public transportation opportunities. In accordance with the LAMC, the Project includes the requisite number of bicycle parking spaces. Taking into consideration the accessibility to mass transit, bicycle parking and proximity to job centers and retail uses, the Project results in a VMT reduction of approximately 47 percent (see Appendix T to this Draft EIR) compared to a Project without Reduction Features, with a corresponding

⁶⁷ CEC, *Wind Resource Area & Wind Resources*, updated October 16, 2017.

reduction in the Project's petroleum-based fuel usage.⁶⁸ Therefore, the Project would encourage the use of efficient transportation alternatives.

(g) *The degree to which the project design and/or operations incorporate energy-conservation measures, particularly those that go beyond City requirements*

The current City of Los Angeles Green Building Code requires compliance with the CalGreen Code and California's Building Energy Efficiency Standards (Title 24). In addition to compliance with the City's Green Building Code, the Project would comply with 2019 Title 24 standards which represent "challenging but achievable design and construction practices" that represent "a major step towards meeting the ZNE goal." Residential and nonresidential buildings built in compliance with the 2019 standards will use about 30 to 53 percent less energy than those under the 2016 standards.⁶⁹ Therefore, the Project would incorporate measures that are above and beyond current State and City energy conservation requirements.

GHG-PDF-2 in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR, would also prohibit the use of natural gas-fueled fireplaces within residential units, resulting in less natural gas consumed during operations. In addition, Project Design Feature WAT-PDF-1 in Section IV.K.1, Utilities and Service Systems—Water Supply and Infrastructure, of this Draft EIR, states that the Project would implement water conservation features, including high-efficiency toilets with flush volume of 1.0 gallon of water per flush, showerheads with a flow rate of 1.5 gallons per minute or less, and drip/subsurface irrigation, among others. A reduction in water usage would in turn reduce the amount of electricity used for water conveyance. Therefore, the Project would incorporate measures that are above and beyond current State and City energy conservation requirements.

The City has also adopted several plans and regulations to promote the reduction, reuse, recycling, and conversion of solid waste going to disposal systems. These regulations include the City of Los Angeles Solid Waste Management Policy Plan, the RENEW LA Plan, the City of Los Angeles Space Allocation Ordinance (Ordinance No. 171,687), and the Exclusive Franchise System Ordinance (Ordinance No. 182,986). These solid waste reduction programs and ordinances help to reduce the number of trips associated with hauling solid waste, thereby reducing the amount of petroleum-based fuel consumed. Furthermore, recycling efforts indirectly reduce the energy necessary to create new products made of raw material, which is an energy-intensive process. As discussed in

⁶⁸ The Project without Reduction Features scenario does not account for energy efficiency measures or trip reductions.

⁶⁹ CEC, 2019 Building Energy Efficiency Standards, Fact Sheet.

the Initial Study included as Appendix A to this Draft EIR, the Project would be consistent with the applicable regulations associated with solid waste. Specifically, the Project would provide adequate storage areas in accordance with Ordinance No. 171,687, which requires that development projects include an on-site recycling area or room of specified size.⁷⁰ The Project would also comply with State and City waste diversion goals, as applicable, by providing clearly marked, source-sorted receptacles to facilitate recycling. Thus, through compliance with the City's construction-related solid waste recycling programs, the Project would contribute to reduced fuel-related energy consumption.

Based on the above, with compliance with state and local energy efficiency standards, the Project would meet all applicable energy conservation policies and regulations.

(h) Conclusion Regarding Significance Threshold (a)

As demonstrated in the analysis above, the Project would not result in potentially significant environmental impacts due to wasteful, inefficient, and unnecessary consumption of energy resources during construction or operation. The Project's energy requirements would not significantly affect local and regional supplies or require additional capacity. The Project's energy usage during peak and base periods would also be consistent with electricity and natural gas future projections for the region. As also discussed, gasoline fuel usage for the region is expected to be on the decline over the next 10 years. Transportation fuel supply is not expected to decrease significantly over this same period and supplies would be sufficient to meet project demand. Therefore, electricity generation capacity and supplies of natural gas and transportation fuels would also be sufficient to meet the needs of project-related construction and operations. With respect to operation, the Project would comply with existing energy efficiency requirements such as CalGreen Code as well as include energy conservation measures beyond requirements. **In summary, the Project's energy demands would not cause wasteful, inefficient, or unnecessary use of energy. Therefore, Project impacts related to energy use under Threshold (a) would be less than significant with respect to both construction and operation.**

(2) Mitigation Measures

The Project's impact related to energy use would be less than significant. Therefore, no mitigation measures are required.

⁷⁰ Ordinance No. 171,687, adopted by the Los Angeles City Council on August 6, 1997.

(3) Level of Significance After Mitigation

The Project's impact related to energy use was determined to be less than significant without mitigation. Therefore, no mitigation measures are required or included, and the impact remains less than significant.

Threshold (b): Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

(1) Impact Analysis

The energy conservation policies and plans relevant to the Project include the California Title 24 energy standards, the 2019 CALGreen Code, the City of Los Angeles Green Building Code, and the 2016–2040 RTP/SCS. As these conservation policies are mandatory under the City's Building Code, the Project would not conflict with applicable plans for renewable energy or energy efficiency. Such requirements of the Title 24, CALGreen and Green Building Code include specific lighting requirements to conserve energy, window glazing to reflect heat, enhanced insulation to reduce heating and ventilation energy usage, and enhanced air filtration. The Project would implement these measures as required by code. The 2019 Title 24 Standards ensure that builders use the most energy efficient and energy conserving technologies and construction practices. In addition, the Project would implement measures to comply with Title 24 energy efficiency requirements, including the GHG-PDFs 1 through 4 and WAT-PDF-1, as discussed above.

With regard to transportation uses, the Project design would reduce VMT in comparison to developments located in non-infill, non-urban areas and encourage use of alternative modes of transportation. The Project would be consistent with regional planning strategies that address energy conservation. As discussed above and in Section IV.F, Land Use, of this Draft EIR, SCAG's 2016–2040 RTP/SCS focuses on creating livable communities with an emphasis on sustainability and integrated planning, and identifies mobility, economy, and sustainability as the three principles most critical to the future of the region. As part of the approach, the 2016–2040 RTP/SCS focuses on reducing fossil fuel use by decreasing VMT, reducing building energy use, and increasing use of renewable sources. The Project would be consistent with the energy efficiency policies emphasized in the 2016–2040 RTP/SCS. Most notably, the Project is a mixed-use residential development located in an area characterized by a high degree of pedestrian activity. The Project would provide greater proximity to neighborhood services, jobs, and residences and would be well-served by existing public transportation, including multiple Metro bus lines,

West Hollywood CityLine and AVTA lines. This is evidenced by the Project Site's location within a designated HQTA.⁷¹

The Project's introduction of new housing within an HQTA is consistent with numerous policies in the 2016–2040 RTP/SCS related to locating new housing near jobs and transit. The 2016–2040 RTP/SCS would result in an estimated eight-percent decrease in VMT by 2020, an 18-percent decrease in VMT by 2035, and a 21-percent decrease in VMT by 2040. Subsequent to adoption of the 2016–2040 RTP/SCS, CARB adopted, in 2018, a new target requiring a 19-percent decrease in VMT for the SCAG region by 2035. It is expected that this new target will be incorporated into the next RTP/SCS. The 2016–2040 RTP/SCS and/or the next RTP/SCS are expected to fulfill and exceed SB 375 compliance with respect to meeting the state's GHG emission reduction goals. The Project daily per capita VMT is 6.2 miles. In comparison, the Project has substantially less per capita VMT than either the 2012 Base Year daily Total VMT per capita of 21.5, or the daily Total VMT per capita is 18.4 for the 2040 Plan Year, in Los Angeles County. As discussed in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR, the Project's daily per capita VMT is 6.2 miles for residents, which is 66 percent less than the SCAG 2040 Plan Year of 18.4 daily per capita VMT. This reduction in VMT is substantially better than the goals of the 2016–2040 RTP/SCS, which contemplates an estimated 18-percent decrease in per capita GHG emissions from passenger vehicles by 2035 and 21-percent decrease in per capita GHG emissions from passenger vehicles by 2040.⁷² Therefore, the Project would be consistent with the goals of the 2016–2040 RTP/SCS with regards to reducing VMT and transportation energy consumption. In addition, the Project would comply with state energy efficiency requirements, would be capable of meeting Title 24 requirements and would use electricity from LADWP, which has a current renewable energy mix of 32 percent. All of these features would serve to reduce the consumption of electricity, natural gas, and transportation fuel. Based on the above, the Project would be consistent with adopted energy conservation plans.

In addition, vehicle trips generated during Project operations would comply with CAFE fuel economy standards. During construction activities, the Project would be required to comply with CARB anti-idling regulations and the In-Use Off-Road Diesel Fleet regulations.

⁷¹ The City's ZIMAS identifies a portion of the Project Site as also located in Transit Priority Area. See Footnote 50, above.

⁷² CARB updated the SB 375 targets for the SCAG region, requiring a 19-percent decrease in VMT by 2035. Implementation of the 2016–2040 RTP/SCS or the next plan is expected to fulfill and exceed the region's obligations under SB 375 with respect to meeting the State's VMT and related GHG emission reduction goals.

Based on the above, the Project would not conflict with or obstruct adopted energy conservation plans, or violate state or local energy standards for renewable energy or energy efficiency. **Therefore, Project's impact related to regulatory consistency under Threshold (b) would be less than significant.**

(2) Mitigation Measures

The Project's impact related to conflicts with plans would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

The Project's impact related to conflicts with plans were determined to be less than significant without mitigation. Therefore, no mitigation measures are required or included, and the impact remains less than significant.

e. Cumulative Impacts

(1) Impact Analysis

(a) *Threshold (a) (Wasteful, Inefficient, and Unnecessary Use of Energy)*

Cumulative impacts occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. Based on the information presented in Section III, Environmental Setting, of this Draft EIR, there are 44 related projects located within the vicinity of the Project Site. The geographic context for the cumulative analysis of electricity is LADWP's service area and the geographic context for the cumulative analysis of natural gas is SoCalGas' service area. While the geographic context for transportation-related energy use is more difficult to define, it is meaningful to consider the Project in the context of County-wide consumption. Growth within these geographies is anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure, such as new or expanded energy facilities.

(i) *Electricity*

Buildout of the Project, the 17 related projects in the LADWP service area, and additional growth forecasted to occur in the City would increase electricity consumption during project construction and operation and, therefore, cumulatively increase the need for energy supplies and infrastructure capacity, such as new or expanded energy facilities. LADWP forecasts that its total energy sales in 2024–2025 fiscal year (the project buildout year) will be 23,286 GWh of electricity. Based on the Project's estimated net new electrical

consumption of 1,378,556 kWh per year, the Project would account for approximately 0.006 percent of LADWP's project sales for the Project's build out year. Although future development would result in the use of renewable and non-renewable electricity resources during construction and operation, which could limit future availability, the use of such resources would be on a relatively small scale, would be reduced by measures making the Project more energy-efficient, and would be consistent with growth expectations for LADWP's service area. The Project also would incorporate energy efficiency measures to make the Project comply with the 2019 Title 24 standards which represent "challenging but achievable design and construction practices" that represent "a major step towards meeting the ZNE goal." Residential and nonresidential buildings built in compliance with the 2019 standards will use about 30 to 53 percent less energy than those under the 2016 standards.⁷³ Furthermore, other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations including the CALGreen Code and state energy standards under Title 24, and incorporate mitigation measures, as necessary.

Additionally, as discussed above, LADWP is required to procure at least 33 percent of their energy portfolio from renewable sources by 2020. The current sources of renewable energy procured by LADWP include wind, solar, and geothermal sources. These sources accounted for 34 percent of LADWP's overall energy mix in 2019, the most recent year for which data are available.⁷⁴ This represents the available offsite renewable sources of energy that could meet the Project's and related projects energy demand. Therefore, the Project and related projects within LADWP's service area would comply with energy conservation plans and efficiency standards required to ensure that energy is used efficiently.

As such, the Project's contribution to cumulative impacts related to wasteful, inefficient and unnecessary use of electricity would not be cumulatively considerable and the Project's incremental effect would be less than significant. Therefore, the cumulative impacts of the Project would be less than significant.

(ii) Natural Gas

Buildout of the Project, the 44 related projects in the SoCalGas service area, and additional growth forecasted to occur in the City would increase natural gas consumption during project construction and operation and, therefore, cumulatively increase the need for energy supplies and infrastructure capacity, such as new or expanded energy facilities. SoCalGas forecasts that its total natural gas consumption in 2024 year (the project buildout

⁷³ CEC, 2019 Building Energy Efficiency Standards, Fact Sheet.

⁷⁴ LADWP, 2019 Power Content Label, October 2020.

year) will be 2.48 billion cf/day. Based on the Project's estimated net new electrical consumption of 1,647,341 cf per year, the Project would account for approximately 0.0002 percent of SoCalGas' projected consumption for the Project's build out year. Although Project development would result in the use of natural gas resources, which could limit future availability, the use of such resources would be on a relatively small scale, would be reduced by measures rendering the Project more energy-efficient, and would be consistent with regional and local growth expectations for SoCalGas' service area. The Project also would incorporate energy efficiency measures to make the Project capable of meeting Title 24 requirements, as required by GHG-PDF-1 and reduce natural gas usage by limiting the number of natural gas-fueled fireplaces, as required by GHG-PDF-2. Furthermore, future development projects within SoCalGas' service area would be expected to incorporate energy conservation features, comply with applicable regulations including the CALGreen Code and State energy standards under Title 24, and incorporate mitigation measures, as necessary. **As such, the Project's contribution to cumulative impacts related to wasteful, inefficient and unnecessary use of natural gas would not be cumulatively considerable and the Project's incremental effect would be less than significant. Therefore, the cumulative impacts of the Project would be less than significant.**

(iii) Transportation Energy

Buildout of the Project, the related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the state and region. As described above, at buildout, the Project would result in a an increase of 47,443 gallons of gasoline and 9,058 gallons of diesel per year, or a total of 56,501 gallons of petroleum-based fuels consumed per year, as shown in Appendix E to this Draft EIR. As discussed above, with incorporation of trip reduction measures, net transportation-fuel usage for the Project would be reduced by 47 percent for both gasoline and diesel fuels.

Related projects in the Project vicinity, as listed in Table III-1 in Section III, Environmental Setting, to this Draft EIR, would also be infill projects locating uses near other residential and commercial uses which would reduce distance travelled, as well as consumption of transportation fuel. As analyzed above, Project transportation fuel usage would represent a small percentage of total fuel consumption within Los Angeles County. While it is speculative to assess transportation fuel usage from related projects, it is expected that cumulative transportation fuel usage resulting from the Project and related projects would be consistent with projections discussed above.

Additionally, as described above, petroleum currently accounts for 90 percent of California's transportation energy sources; however, over the last decade the State has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHGs from the

transportation sector, and reduce vehicle miles traveled, which would reduce reliance on petroleum fuels. According to the California Department of Tax and Fee Administration, gasoline consumption has increased by 4 percent from 2010 to 2018;⁷⁵ however, the CEC predicts that there will be an increase in the use of alternative fuels, such as natural gas, biofuels, and electricity. As with the Project, other future development projects would be expected to reduce VMT by encouraging the use of alternative modes of transportation and other design features that promote VMT reductions.

Furthermore, as previously discussed, the Project would be consistent with the energy efficiency policies emphasized by the 2016–2040 RTP/SCS. Specifically, the Project is a mixed-use residential development in an area that is characterized by a high degree of pedestrian activity. The Project would provide greater proximity to neighborhood services, and would be well-served by existing public transportation, including multiple Metro lines, West Hollywood CityLine and AVTA lines. The Project also would introduce new housing within an HQTA, which is consistent with numerous policies in the 2016–2040 RTP/SCS related to locating new jobs near transit.⁷⁶ Although there are no per capita GHG emission reduction targets for passenger vehicles set by CARB for 2040, the 2016–2040 RTP/SCS GHG emission reduction trajectory shows that more aggressive GHG emission reductions are projected for 2040.⁷⁷ Implementation of the 2016–2040 RTP/SCS would result in an estimated eight-percent decrease in per capita GHG emissions by 2020, 18-percent decrease in per capita GHG emissions by 2035, and 21-percent decrease in per capita GHG emissions by 2040. As discussed above, CARB updated the SB 375 targets for the SCAG region, requiring a 19-percent decrease in VMT by 2035. Implementation of the 2016–2040 RTP/SCS or the next plan is expected to fulfill and exceed the region's obligations under SB 375 with respect to meeting the State's GHG emission reduction goals. In addition, the Project would further reduce VMT through such measures as transit accessibility as estimated by CalEEMod, which would be consistent with the reduction in transportation emission per capita provided in the 2016–2040 RTP/SCS. As the 2016–2040 RTP/SCS is a regional plan which includes the City of Los Angeles, this analysis applies with equal force to the related projects. Related projects

⁷⁵ California Department of Tax and Fee Administration, Fuel Taxes Statistics & Reports, www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm, accessed February 24, 2021.

⁷⁶ The City's ZIMAS identifies a portion of the Project Site as also located in Transit Priority Area as defined by Public Resources Code Section 20199. Public Resources Code Section 21099 defines a "transit priority area" as an area within 0.5 mile of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." Public Resources Code Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods."

⁷⁷ SCAG, 2016–2040 RTP/SCS, April 2016, p. 153.

would be urban infill projects located near other commercial, retail and entertainment uses which would encourage alternative modes of transport reducing vehicle trips.

Although the 2016–2040 RTP/SCS is intended to reduce GHG emissions, the reduction in VMT would also result in reduced transportation fuel consumption. By its very nature, the 2016–2040 RTP/SCS is a regional planning tool that addresses cumulative growth and resulting environmental effects. **As the Project is consistent with the 2016–2040 RTP/SCS, its contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of transportation fuel would not be cumulatively considerable and the Project's incremental effect would be less than significant. Therefore, the cumulative impacts of the Project would be less than significant.**

(iv) Conclusion

Based on the analysis provided above the Project's contribution to cumulative impacts related to energy consumption (i.e., electricity, natural gas, and fuel) ; and impacts related to the wasteful, inefficient, and unnecessary consumption of energy during construction or operation would not be cumulatively considerable and the Project's incremental effect would be less than significant. As such, cumulative energy impacts under this significance threshold are concluded to be less than significant.

(b) Consistency with State or Local Plans

Related projects within the Project area, as listed in Table III-1 in Section III, Environmental Setting, to this Draft EIR, as well as future development projects, would be required to comply with energy conservation and renewable energy plans and policies described above, including Title 24, CALGreen Code, and the City of Los Angeles Green Building Code. As related projects would be required to meet the same energy consumption standards, there would be no significant cumulative impacts with regard to consistency with energy conservation plans.

Furthermore, as described above, the Project would be consistent with the policies emphasized by the 2016–2040 RTP/SCS. The Project would include residential uses and located near public transit which would result in a VMT reduction. As discussed in Section IV.C, Greenhouse Gas Emissions, of this Draft EIR, per capita VMT is 6.2 miles for residents, which would be consistent with the reduction in transportation emission per capita provided in the 2016–2040 RTP/SCS and with CARB's updated 2035 target. As discussed previously, this represents a per capita VMT reduction of 66 percent when compared to SCAG 2016–2040 RTP/SCS target for Year 2040. This reduction in VMT is substantially better than the goals of the 2016–2040 RTP/SCS with an estimated 18-percent decrease in per capita GHG emissions from passenger vehicles by 2035 and 21-percent

decrease in per capita GHG emissions from passenger vehicles by 2040.⁷⁸ It is uncertain whether all related projects would be consistent with the RTP/SCS targets. However, related projects would be urban infill projects which are located near mass transit and other commercial, retail and entertainment uses which would reduce vehicle trips. As a result, related projects would likely achieve a similar reduction in vehicle trips and VMT in comparison to the Project.

For these reasons the Project's contribution to cumulative impacts related to consistency with adopted energy conservation plans, or state or local energy standards for renewable energy or energy efficiency would not be cumulatively considerable and the Project's incremental effect would be less than significant. Therefore, the cumulative impacts of the Project would be less than significant.

(2) Mitigation Measures

Cumulative impacts related to energy use and conflicts with plans would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance after Mitigation

Cumulative impacts related to energy use and conflicts with plans were determined to be less than significant without mitigation. Therefore, no mitigation measures are required or included, and the impact levels remains less than significant.

⁷⁸ CARB updated the SB 375 targets for the SCAG region, requiring a 19-percent decrease in VMT by 2035. Implementation of the 2016–2040 RTP/SCS or the next plan is expected to fulfill and exceed the region's obligations under SB 375 with respect to meeting the State's VMT and related GHG emission reduction goals.