IV. Environmental Impact Analysis

J.2 Utilities and Service Systems—Energy Infrastructure

1. Introduction

The following section analyzes the Project's potential impacts upon electric power and natural gas infrastructure. This section focuses on the existing infrastructure serving the Project area and the potential for environmental impact to occur as a result of any physical improvements that may be necessary to accommodate the proposed Project. The information presented in this section is based in part on the information provided by the City of Los Angeles Department of Water and Power (LADWP), the *Energy Calculations for The Bloc Project* prepared by Eyestone Environmental, and the *Utility Infrastructure Technical Report: Water and Energy*, prepared for the Project by KPFF Consulting Engineers, dated October 2023 (Utility Report), which are included as Appendix D and Appendix K to this Draft EIR, respectively. Potential impacts associated with energy demand and energy conservation policies are discussed in Section IV.C, Energy of this Draft EIR.

2. Environmental Setting

a. Regulatory Framework

There are several plans, policies, and programs regarding electric power and natural gas infrastructure at the federal and state levels. Described below, these include:

- United States Department of Energy (the Energy Policy Act of 2005)
- California Independent System Operator
- California Public Utilities Commission
- California Energy Commission
- Senate Bill 1389
- Los Angeles Ordinance No. 187,714

(1) Federal

The United States Department of Energy (DOE) is the federal agency responsible for establishing policies regarding energy conservation, domestic energy production, and infrastructure. The Federal Energy Regulatory Commission (FERC) is an independent federal agency, officially organized as part of the DOE, which is responsible for regulating interstate transmission of natural gas, oil, and electricity; ensuring reliability of the electric grid; and approving construction of interstate natural gas pipelines and storage facilities. The Energy Policy Act of 2005 has also granted FERC with additional responsibilities of overseeing the reliability of the nation's electricity transmission grid and supplementing state transmission siting efforts in national interest electric transmission corridors.

FERC has authority to oversee mandatory reliability standards governing the nation's electricity grid. FERC has established rules on certification of an Electric Reliability Organization (ERO), which establishes, approves, and enforces mandatory electricity reliability standards. The North American Electric Reliability Corporation (NERC) has been certified as the nation's ERO by FERC to enforce reliability standards in all interconnected jurisdictions in North America. Although FERC regulates the bulk energy transmission and reliability throughout the United States, the areas outside of FERC's jurisdictional responsibility include state level regulations and retail electricity and natural gas sales to consumers, which fall under the jurisdiction of state regulatory agencies.

(2) State

California energy infrastructure policy is governed by three institutions: the California Independent System Operator (California ISO), the California Public Utilities Commission (CPUC), and the California Energy Commission (CEC). These three agencies share similar goals but have different roles and responsibilities in managing the State's energy needs. The majority of state regulations with respect to electricity and natural gas pertain to energy conservation. For a discussion of these regulations, refer to Section IV.C, Energy of this Draft EIR. There are, however, regulations pertaining to infrastructure. These are discussed further below.

(a) California Independent System Operator

The California ISO is an independent public benefit corporation responsible for operating California's long-distance electric transmission lines. The California ISO is led by a five-member board appointment by the Governor and is also regulated by FERC. While transmission owners and private electric utilities own their lines, the California ISO operates the transmission system independently to ensure that electricity flows comply with federal operational standards. The California ISO analyzes current and future electrical demand and plans for any needed expansion or upgrade of the electric transmission system.

(b) California Public Utilities Commission

The CPUC establishes policies and rules for electricity and natural gas rates provided by private utilities in California, such as Southern California Edison (SCE) and Southern California Gas Company (SoCalGas). Publicly-owned utilities, such as LADWP, do not fall under the CPUC's jurisdiction. The Digital Infrastructure and Video Competition Act of 2006 (DIVCA) established the CPUC as the sole cable/video TV franchising authority in the State of California. DIVCA took effect January 1, 2007.

The CPUC is overseen by five commissioners appointed by the Governor and confirmed by the State Senate. The CPUC's responsibilities include regulating electric power procurement and generation, infrastructure oversight for electric transmission lines and natural gas pipelines, and permitting of electrical transmission and substation facilities.

(c) California Energy Commission

The CEC is a planning agency, which provides guidance on setting the State's energy policy. Responsibilities include forecasting electricity and natural gas demand, promoting and setting energy efficiency standards throughout the State, developing renewable energy resources, and permitting thermal power plants 50 megawatts (MW) and larger. The CEC also has specific regulatory authority over publicly-owned utilities to certify, monitor, and verify eligible renewable energy resources procured.

(d) Senate Bill 1389

Senate Bill (SB) 1389 (Public Resources Code Sections 25300–25323), adopted in 2002, requires the development of an integrated plan for electricity, natural gas, and transportation fuels. Under the bill, the CEC must adopt and transmit to the Governor and Legislature an Integrated Energy Policy Report every two years. In 2021, the CEC decided to write the Integrated Energy Policy Report in four volumes that were subsequently published in February 2022. Volume I highlights the actions necessary to decarbonize buildings within California. Additionally, the volume explores ways to reduce greenhouse gases from the agricultural and industrial sectors. Volume II explores actions to ensure California's energy system remains reliable and resilient. Volume III examines the role of gas in the energy system. Finally, Volume IV forecasts future demand in the electricity, gas, and transportation sectors.¹

¹ California Energy Commission, 2021 Integrated Energy Policy Report, February 2022.

(3) Local

(a) Ordinance No. 187,714

In December 2022, the City approved Ordinance No. 187,714, which requires all newly constructed buildings to be all electric. Cooking equipment contained within kitchens in a public use area, such as restaurants, commissaries, cafeterias, and community kitchens are exempt as long as electrical infrastructure is installed. Occupancy Groups I-2 (institutions such as hospitals), F (industrial) and L (laboratories) are also exempt.

b. Existing Conditions

(1) Electricity

LADWP provides electrical service throughout the City and many areas of the Owens Valley, serving approximately 4 million people within a service area of approximately 465 square miles, excluding the Owens Valley. Electrical service 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 2022 Power Strategic Long-Term Resource Plan, the LADWP has a net dependable generation capacity greater than 8,101 MW.² In 2017, the LADWP power system experienced an instantaneous peak demand of 6,502 MW.³ Approximately 35.6 percent of LADWP's 2022 electricity purchases were from renewable sources, which is similar to the 35.8-percent statewide percentage of electricity purchases from renewable sources.⁴

LADWP supplies electrical power to the Project Site from electrical service lines located in the Project vicinity. According to the Utility Report, the Project Site receives electric power service from LADWP via existing underground conduits from Hope Street and 8th Street. Existing electricity usage was estimated based on the same methodology contained in the greenhouse gas (GHG) analysis included in Section IV.D, Greenhouse Gas Emissions of this Draft EIR (California Emissions Estimator Model [CalEEMod]

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² LADWP, 2022 Power Strategic Long-Term Resource Plan, p. ES-5, December 2022.

³ LADWP, 2022 Power Strategic Long-Term Resource Plan, p. ES-5, December 2022.

⁴ LADWP, 2022 Power Content Label, October 2023.

Version 2022.1). It is estimated that existing uses consume approximately 19,289,068 kilowatt hours (kWh) of electricity per year of which uses to be removed on the Project Site currently consume approximately 262,494 kilowatt hours (kWh) of electricity per year.⁵

(2) Natural Gas

Natural gas is provided to the Project Site by SoCalGas. SoCalGas is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.1 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.⁶

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.⁷ 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 69 million cubic feet (cf) per day in 2021 (the most recent year for which data are available).⁸

SoCalGas supplies natural gas to the Project Site from natural gas service lines located in the Project vicinity. According to the Utility Report, there are several SoCal-Gas mains located within the project vicinity.⁹ It is estimated that existing uses consume approximately 27,420,056 cf of natural gas per year of which uses to be removed on the Project Site currently consume approximately 144,203 cf of natural gas per year.¹⁰

⁵ Eyestone Environmental, Energy Calculations for The Bloc Project. See Appendix D of this Draft EIR.

SoCalGas, Company Profile, www.socalgas.com/about-us/company-profile, accessed May 10, 2023.

⁷ California Gas and Electric Utilities, 2022 California Gas Report, p. 135.

⁸ California Gas and Electric Utilities, 2022 California Gas Report, p. 135.

⁹ KPFF Consulting Engineers, Utility Infrastructure Technical Report: Water and Energy, October 2023. Refer to Appendix K to this Draft EIR.

Eyestone Environmental, Energy Calculations for The Bloc Project. See Appendix D of this Draft EIR.

3. Project Impacts

a. Thresholds of Significance

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

Threshold (a): Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?¹¹

For this analysis, the Appendix G Threshold provided above is relied upon. This analysis utilizes factors and considerations identified in the *L.A. CEQA Thresholds Guide*, as appropriate, to assist in answering the Appendix G Threshold question.

The *L.A. CEQA Thresholds Guide* identifies the following criteria to evaluate impacts to energy infrastructure:

- Would the project result in the need for new (off-site) energy supply facilities, or major capacity enhancing alterations to existing facilities?
- Whether and when the needed infrastructure was anticipated by adopted plans?

b. Methodology

This analysis evaluates the potential impact of the Project on existing energy infrastructure by comparing the estimated Project energy demand with the available capacity. Will-serve letters from LADWP and SoCalGas included in Appendix K to this Draft EIR demonstrate that sufficient electricity and natural gas infrastructure exists around the Project Site to serve the Project.

Project energy usage was calculated using CalEEMod Version 2022.1. 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

Refer to the Project's Initial Study (Appendix A of this Draft EIR) for a discussion of stormwater, wastewater, and telecommunications facility impacts and Section IV.J.1, Water Supply and Infrastructure, to this Draft EIR for a discussion of water infrastructure.

necessitating electrical power. In terms of natural gas, construction activities typically do not involve the consumption of natural gas and current plans do not involve use of natural gas-powered construction equipment. During Project operation, energy consumption would include electricity from uses such as heating, ventilation, and air conditioning (HVAC); refrigeration; lighting; and the use of electronics, equipment, and machinery. In terms of natural gas, the Project would not allow for natural gas equipment to be installed as part of the Project. Additional details regarding Project energy usage are provided in Section IV.C, Energy, and Appendix D to this Draft EIR.

The Project's estimated energy demands were also analyzed relative to LADWP's existing and planned energy supplies in 2031 (i.e., the Project buildout year) to determine if LADWP would be able to meet the Project's energy demands. Finally, the capacity of local infrastructure to accommodate the Project's estimated electricity demand was assessed based on the Utility Report, included as Appendix K to this Draft EIR.

c. Project Design Features

No specific project design features are proposed with regard to energy infrastructure other than the proposed improvements described in Section II, Project Description, of this Draft EIR. The Project also includes project design features designed to improve energy efficiency, as set forth in Section IV.D, Greenhouse Gas Emissions, including Project Design Feature GHG-PDF-1 and Section IV.J.1, Utilities and Service Systems—Water Supply and Infrastructure, including Project Design Feature WAT-PDF-2, of this Draft EIR. The Project would also comply with the energy efficiency requirements of the California Building Standards Code (Title 24), Los Angeles Green Building Code, and CALGreen Code and would be constructed and operated in accordance with the energy efficiency and other sustainability measures required to achieve Leadership in Energy and Environmental Design (LEED®) Silver certification or equivalent green building standards. Compliance with these energy-related project design features and requirements would reduce the Project's energy demand and the impact such demand would have on the electricity and natural gas infrastructure capacity.

d. Analysis of Project Impacts

Threshold (a): Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications

facilities, the construction or relocation of which could cause significant environmental effects?¹²

- (1) Impact Analysis
 - (a) Construction
 - (i) Electricity

As discussed above, construction activities at the Project Site would require minor quantities of electricity for lighting, power tools and other support equipment. Heavy construction equipment would be powered with diesel fuel. As discussed in Section IV.C, Energy of this Draft EIR, the Project's estimated construction electricity usage represents approximately 19.3 percent of the estimated Project Site's existing annual operational demand of uses to be removed which, as discussed below, would be within the supply and infrastructure service capabilities of LADWP. Thus, LADWP's existing electrical infrastructure currently has enough capacity to provide service for construction activities. Electricity during Project construction would be obtained from existing electrical lines that connect to the Project Site. This would be 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. Therefore, existing off-site infrastructure would not have to be expanded or newly developed to provide electricity to the Project Site during any phase of construction.

With regard to existing electrical distribution lines, the Applicant would be required to coordinate electrical infrastructure removals or relocations with LADWP and comply with site-specific requirements set forth by LADWP, which would ensure that service disruptions and potential impacts associated with all phases of construction within LADWP easements are minimized. Project contractors would notify and coordinate with LADWP to identify the locations and depth of water mains and power lines and avoid disruption of electric and water service to other properties. As such, construction of the Project would not adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

Therefore, based on the above, construction of the Project would not result in an increase in demand for electricity that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new electric power facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and the Project's impact would, therefore, be less than significant.

Refer to the Project's Initial Study (Appendix A to this Draft EIR) for a discussion of stormwater, wastewater, and telecommunications facility impacts and Section IV.J.1, Water Supply and Infrastructure.

(ii) 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. Since the Project Site is located in an area already served by existing natural gas infrastructure, it is anticipated that the Project would not require extensive off-site infrastructure improvements to serve the Project Site. Construction impacts associated with the installation of natural gas connections are expected to be confined to trenching in order to place the lines below surface. In addition, prior to ground disturbance, Project contractors would notify and coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service to other properties. Therefore, construction of the Project would not result in an increase in demand for natural gas to affect available supply or distribution infrastructure capabilities and would not result in the relocation or construction of new or expanded natural gas facilities, the construction or relocation of which could cause significant environmental effects, and no impact would occur.

(b) Operation

(i) Electricity

As shown in Table IV.C-2 in Section IV.C, Energy of this Draft EIR, the Projectrelated annual electricity consumption of 4,571,455 kWh per year would represent less than 0.02 percent of LADWP's projected sales in 2031. In addition, during peak conditions, the Project would represent approximately 0.02 percent of the LADWP estimated peak load. Additionally, LADWP has confirmed that the Project's electricity demand can be served by the facilities in the Project area. 13 Furthermore, the Project would implement any necessary connections and upgrades required by LADWP to ensure that LADWP would be able to adequately serve the Project. As such, operation of the Project is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity and would not require the construction of new electrical facilities or expansion of existing facilities. Therefore, operation of the Project would not result in an increase in demand for electricity that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new electrical facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and the Project's impacts would, therefore, be less than significant.

¹³ KPFF Consulting Engineers, Utility Infrastructure Technical Report: Water and Energy, October 2023. Refer to Appendix K to this Draft EIR.

(ii) Natural Gas

As shown in Table IV.C-2 in Section IV.C, Energy of this Draft EIR, the Project would result in a net decrease in the on-site demand for natural gas totaling approximately -144,203 cf per year due to the removal of certain retail uses that currently consume natural gas. In compliance with Ordinance 187,714, the proposed residential uses would be located within an all-electric building. Therefore, operation of the Project would not result in an increase in demand for natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new natural gas facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and the Project's impacts would, therefore, be less than significant.

(c) Conclusion

As demonstrated in the analysis above, construction and operation of the Project would not result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Therefore, Project impacts related to energy infrastructure capacity would be less than significant during construction and operation.

(2) Mitigation Measures

Project-level impacts with regard to energy infrastructure would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to energy infrastructure 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.

e. Cumulative Impacts

(1) Impact Analysis

(a) Electricity

Buildout of the Project, related projects listed in Table III-1 in Section III, Environmental Setting of this Draft EIR, and additional forecasted growth in LADWP's service area would cumulatively increase the demand for electricity supplies and

infrastructure capacity. LADWP forecasts that its total energy sales in the 2031–2032 fiscal year (the Project's buildout year) will be 23,276 gigawatt hours (GWh) of electricity. Based on the Project's estimated electrical consumption of 4,571,455 kWh per year, the Project would account for approximately 0.02 percent of LADWP's projected sales for the Project's buildout year. In addition, LADWP has confirmed that the Project's electricity demand can be served by the facilities in the Project area. Data used to develop the LADWP demand forecasts take into account population growth, energy efficiency improvements, and economic growth, which includes construction projects. Electricity infrastructure is typically expanded in response to increasing demand, and system expansion and improvements by LADWP are ongoing. LADWP would continue to expand delivery capacity as needed to meet demand increases within its service area at the lowest cost and risk, consistent with LADWP's environmental priorities and reliability standards.

The 2022 Power Strategic Long-Term Resource Plan takes into account future energy demand, advances in renewable energy resources and technology, energy efficiency, conservation, and forecast changes in regulatory requirements. Development projects within the LADWP service area would also be anticipated to incorporate site-specific infrastructure improvements, as necessary. Although detailed information regarding electrical infrastructure for development projects in LADWP's service area is not known, it is reasonably expected that LADWP would provide for necessary improvements specific to each development project. Each of the development projects would be reviewed by LADWP to identify necessary power facilities and service connections to meet the needs of their respective projects. Project applicants would be required to provide for the needs of their individual projects, thereby contributing to the electrical infrastructure in the service area. As discussed above, will-serve letters are provided for individual projects in which LADWP determines whether sufficient infrastructure is in place to provide electricity to a proposed project. As part of the will-serve letter process, LADWP takes into account all uses (including future development projects) in the service area to ensure that sufficient local and regional infrastructure is adequate. As the will-serve letter for the Project identified adequate infrastructure (See Exhibit 4 of the Utility Report), the estimated power requirement for the Project is a part of the total load growth forecast for the City of Los Angeles and has been taken into account in the planned growth of the City's power system. ¹⁷ For these reasons: (1) the Project's

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¹⁴ 4.435278 GWh / 23,726 GWh = 0.0191

KPFF Consulting Engineers, Utility Infrastructure Technical Report: Water and Energy, October 2023. Refer to Appendix K to this Draft EIR.

LADWP, 2022 Power Strategic Long-Term Resource Plan, Appendix A, Table A-1, p. A-7, December 2022.

¹⁷ KPFF Consulting Engineers, Utility Infrastructure Technical Report: Water and Energy, October 2023. Refer to Appendix K to this Draft EIR.

contribution to cumulative impacts related to electricity infrastructure would not be cumulatively considerable and, therefore, would be less than significant; and (2) the cumulative impact of the Project's incremental effect and the effect of related projects related to electricity infrastructure would be less than significant.

(b) Natural Gas

As discussed above, Project operations would not result in the use of natural gas resources due to compliance with the City's All-Electric Ordinance. In addition, the related projects listed in Table III-1 in Section III, Environmental Setting, of this Draft EIR, would also result in a reduction in the use of natural gas resources due to compliance with the City's All-Electric Ordinance. SoCalGas serves the City, the City of Beverly Hills, and the City of West Hollywood. SoCalGas forecasts that its total natural gas consumption in 2031 will be 2.090 billion cf/day. Based on the Project's estimated net decrease in natural gas consumption of 144,203 cf per year, the Project would not affect SoCalGas' projected consumption for the Project's buildout year. Moreover, SoCalGas' forecasts consider projected population growth and development based on local and regional plans.

As discussed above, will-serve letters are provided for individual projects, in which SoCalGas determines whether sufficient infrastructure is in place to provide natural gas service to a proposed project. As part of the will-serve letter process, SoCalGas takes into account all uses (including future development projects) in the service area to ensure that sufficient local and regional infrastructure is adequate. As discussed above, the Project would comply with the City's All-Electric Ordinance and the will-serve letter for the Project (See Exhibit 4 of the Utility Report) identified adequate infrastructure; thus, construction of the Project would not significantly affect the SoCalGas regional infrastructure.

For these reasons: (1) the Project's contribution to cumulative impacts with respect to natural gas infrastructure would not be cumulatively considerable and, therefore, would be less than significant; and (2) the cumulative impact of the Project's incremental effect and the effect of related projects related to natural gas infrastructure would be less than significant.

(c) Conclusion

Based on the analysis provided above: (1) the Project's contribution to cumulative impacts related to energy consumption (i.e., electricity, natural gas) would not result in a cumulatively considerable effect related to distribution infrastructure capabilities that could result in the construction of new energy

¹⁸ California Gas and Electric Utilities, 2022 California Gas Report, p. 185.

facilities or expansion of existing facilities and, therefore, would be less than significant; and (2) the cumulative impact of the Project's incremental effect and the effect of related projects related to electricity and natural gas infrastructure would be less than significant.

(2) Mitigation Measures

Cumulative impacts with regard to energy infrastructure would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance after Mitigation

Cumulative impacts related to energy infrastructure 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.