

IV. Environmental Impact Analysis

M.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 Site vicinity and the potential for environmental impact to occur as a result of any physical improvements that may be necessary to accommodate the Project. The information presented in this section is based in part on the *Energy Calculations for the New Beatrice West Project* prepared by Eyestone Environmental and the *Utility Technical Report for New Beatrice West* (Utility Report) prepared by Barbara L. Hall, P.E., Inc. (September 2022), which are included as Appendix E and Appendix M of this Draft EIR, respectively. Potential impacts associated with energy demand and energy conservation policies are discussed in Section IV.D, 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 (Energy Policy Act of 2005)
- California Independent System Operator
- California Public Utilities Commission
- California Energy Commission
- Senate Bill 1389
- City of Los Angeles Information Technology Agency
- City of Los Angeles Municipal Code Section 10.5.4

(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 VI.D, 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 the Los Angeles Department of Water and Power (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 2018, the CEC decided to write the Integrated Energy Policy Report in two volumes. Volume I, which was published on August 1, 2018, highlights the implementation of California's innovative policies and the role they have played in moving toward a clean energy economy. Volume II, which was adopted in February 2019, identifies several key energy issues and actions to address these issues and ensure the reliability of energy resources.¹

¹ *California Energy Commission, 2018 Integrated Energy Policy Report Updated, 2019, Volume II.*

b. Existing Conditions

(1) Electricity

LADWP provides electrical service throughout the City of Los Angeles 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 Resources 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 percent of LADWP's 2021 electricity purchases were from renewable sources, which is better than the 34 percent statewide percentage of electricity purchases from renewable sources.⁴

LADWP supplies electrical power to the Project site from electrical service lines located on Jandy Place and Beatrice Street. Existing electricity usage was estimated based on the same methodology contained in the greenhouse gas (GHG) analysis included in Section IV.F, Greenhouse Gas Emissions, to this Draft EIR (California Emissions Estimator Model [CalEEMod] Version 2022.1). It is estimated that existing uses to be removed on the Project site currently consume approximately 2,123,097 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 21.8 million customers in more than

² LADWP, 2022 Power Strategic Long-Term Resources Plan.

³ LADWP, 2022 Power Strategic Long-Term Resources Plan.

⁴ LADWP 2021 Power Content Label, October 2022.

⁵ Eyestone Environmental, Energy Calculations for the New Beatrice West Project. See Appendix E of this Draft EIR. This value does not include electricity usage for existing office uses that will remain on the Project site.

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's natural gas demand. Gas supply available to SoCalGas from California sources averaged 69 million 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 vicinity of the Project site, including a 4-inch gas main in Beatrice Street and a 3-inch gas main in Jandy Place. It is estimated that existing uses to be removed on the Project site currently consume approximately 2,123,097 cf of natural gas per year.⁹

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?¹⁰

⁶ SoCalGas, *Company Profile*, www.socalgas.com/about-us/company-profile, accessed October 4, 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 *Eyestone Environmental, Energy Calculations for the New Beatrice West Project. See Appendix E of this Draft EIR. This value does not include natural gas consumption for existing office uses that will remain on the Project site.*

¹⁰ *Refer to the Project's Initial Study (Appendix A of this Draft EIR) for a discussion of stormwater impacts, wastewater infrastructure, and telecommunications facility infrastructure; and Section IV.M.1, Utilities and Service Systems—Water Infrastructure, to this Draft EIR for a discussion of water infrastructure.*

In assessing impacts related to energy infrastructure in this section, the City will use Threshold (a) from Appendix G as the threshold of significance. The factors and considerations identified below from the *L.A. CEQA Thresholds Guide* will be used where applicable and relevant to assist in analyzing the Appendix G significance threshold.

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

- Would the project result in the need for new (offsite) 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 impacts 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 M of this Draft EIR demonstrate the availability of sufficient energy resources to supply the Project's demand.

Project energy usage, including electricity and natural gas, 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 necessitating electrical power. Construction activities typically do not involve the consumption of natural gas. During Project operation, energy consumption would include electricity and natural gas from uses, such as heating/ventilation/air conditioning (HVAC); water heating, cooking, lighting, and use of electronics/appliances. Additional details regarding Project energy usage are provided in Section IV.D, Energy, and Appendix E of this Draft EIR.

The Project's estimated energy demands were also analyzed relative to LADWP's and SoCalGas' existing and planned energy supplies in 2025 (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 Utility Report, included as Appendix M of this Draft EIR.

c. Project Design Features

No specific project design features are proposed with regard to energy infrastructure. However, the Project includes project design features designed to improve energy efficiency, as set forth in Section IV.B, Air Quality and Section IV.F, Greenhouse Gas Emissions, of this Draft EIR, including Project Design Feature AIR-PDF-1 and Project Design Feature GHG-PDF-1.

d. Analysis of Project Impacts

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

(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 detailed in Section IV.D, Energy, of this Draft EIR, during Project construction activities, electricity usage would represent approximately 1.37 percent of the estimated Project's net annual operational demand which, as discussed below, would be within the supply and infrastructure service capabilities of LADWP.¹² Moreover, the electricity demand during construction would be offset with the temporary removal of the existing on-site uses to be removed, which currently generate a demand for electricity.¹³ Thus, LADWP's existing electrical infrastructure currently has enough capacity to provide service for construction activities. As discussed in Section IV.D, Energy, of this Draft EIR, electricity to the Project site during construction would be supplied by LADWP and would be obtained from the existing

¹¹ Refer to the Project's Initial Study (Appendix A of this Draft EIR) for a discussion of stormwater impacts, wastewater infrastructure, and telecommunications facility infrastructure; and Section IV.M.1, Utilities and Service Systems—Water Infrastructure, to this Draft EIR for a discussion of water infrastructure.

¹² The percentage is derived by taking the total amount of electricity usage during construction (27,782 kWh) and dividing that number by the total amount of net electricity usage during operation (2,027,266 kWh) to arrive at 1.37 percent.

¹³ Values presented for existing electricity usage does not include electricity usage for existing office uses that will remain on the Project site.

electrical lines that connect to the Project site, as provided in Project Design Feature AIR-PDF-1 included in Section IV.B, Air Quality, of this Draft EIR. Specifically, Project Design Feature AIR-PDF-1 would require the use of electricity from power poles and/or solar powered generators rather than temporary gasoline or diesel powered generators. Therefore, existing offsite infrastructure would not have to be expanded or newly developed to provide electrical service to the Project site during construction activities.

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 construction activities within LADWP easements are minimized. Project contractors would notify and coordinate with LADWP to identify the locations of power lines and avoid disruption of electricity 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.

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 energy 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.

(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. However, the Project would involve installation of new natural gas connections to serve the Project site. 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 offsite 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.**

(b) Operation

(i) Electricity

As shown in Table IV.D-2 in Section IV.D, Energy, of this Draft EIR, the Project's operational electricity usage would be 5,863,013 kWh per year, which is 0.028 percent of LADWP's projected sales in 2025 (the Project's projected build out year).¹⁴ In addition, during peak conditions, the Project would represent approximately 0.02 percent of the LADWP estimated peak load of 5,646 MW.¹⁵ As discussed in the Utility Report, LADWP has confirmed that the Project's electricity demand can be served by the infrastructure in the Project area, including existing power poles on Jandy Place and Beatrice Street.¹⁶ Furthermore, the Project would implement any necessary new lines, 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 result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. **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 energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.**

(ii) Natural Gas

As shown in Table IV.D-2 in Section IV.D, Energy, of this Draft EIR, the Project would consume 214,171 cubic feet per year less natural gas. As the Project's natural gas consumption results in a decrease in the onsite demand for natural gas, the Project would be consistent with the forecasted 2025 consumption in SoCalGas' planning area. SoCalGas has confirmed that the Project's natural gas demand can be served by the facilities in the Project area.¹⁷ Furthermore, the Project would implement any necessary connections and upgrades required by SoCalGas to ensure that SoCalGas would be able to adequately serve the Project. Thus, operation 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 construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

¹⁴ LADWP, 2022 Power Strategic Long-Term Resources Plan, December 2017, Appendix A, Table A-1.

¹⁵ LADWP, 2022 Power Strategic Long-Term Resources Plan, December 2017, Appendix A, p A-7.

¹⁶ Barbara L. Hall, P.E., Inc., Utility Technical Report for New Beatrice West, September 2022. Refer to Appendix M of this Draft EIR.

¹⁷ Barbara L. Hall, P.E., Inc., Utility Technical Report for New Beatrice West, September 2022. Refer to Appendix M of this Draft EIR

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 energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

(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, the Project's impact related to energy infrastructure be less than significant during construction and operation.**

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

Impacts related to energy infrastructure were determined to be less than significant without mitigation. Therefore, no mitigation measures are required, and the impact level remains less than significant.

e. Cumulative Impacts

(1) Impact Analysis

(a) Electricity

Buildout of the Project, the related project, 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 2025–2026 fiscal year (the Project's buildout year) will be 20,874 GWh of electricity.^{18,19} The Project's net operational electricity usage would be 5,863,013 kWh per year, which is 0.028 percent of

¹⁸ LADWP defines its future electricity supplies in terms of sales that will be realized at the meter.

¹⁹ LADWP, 2022 Power Strategic Long-Term Resources Plan, December 2022, Appendix A, Table A-1.

LADWP's projected sales in 2025 (the Project's projected build out year).²⁰ Data used to develop the LADWP demand forecasts take into account population growth, energy efficiency improvements, and economic growth, which includes construction projects.²¹ 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 Resources 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, as needed. Specifically, development projects would be reviewed by LADWP to identify necessary power facilities and service connections to meet the needs of the specific project. Additionally, 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. **For these reasons: (1) the Project's contribution to cumulative impacts related to new or expanded 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 new or expanded electricity infrastructure would be less than significant.**

(b) Natural Gas

Buildout of the Project, the related project, and additional forecasted growth in SoCalGas' service area would cumulatively increase the demand for natural gas supplies and infrastructure capacity. As stated above, SoCalGas has confirmed that the Project's natural gas demand can be served by the facilities in the Project area. Therefore, the Project would not contribute to a cumulative impact related to natural gas infrastructure. Based on the uses proposed by the one related project identified in the vicinity of the Project site, it is anticipated that such related project would similarly comprise a limited

²⁰ LADWP, 2022 Power Strategic Long-Term Resources Plan, December 2022, Appendix A, Table A-1.

²¹ LADWP, 2022 Power Strategic Long-Term Resources Plan, December 2022.

percentage of overall natural gas consumption in SoCalGas' service area. Moreover, SoCalGas' forecasts take into account projected population growth and development based on local and regional plans. Therefore, natural gas usage resulting from future operations of the Project and related project is likely accounted for in the SoCalGas projections.

Natural gas infrastructure is typically expanded in response to increasing demand and system expansion and improvements by SoCalGas occur as needed. It is expected that SoCalGas would continue to expand delivery capacity if necessary to meet demand increases within its service area. Although detailed information regarding natural gas infrastructure for each of the development projects is not known, it is expected that SoCalGas would provide for necessary improvements specific to each development project, as needed. Development projects within its service area would also be anticipated to incorporate site-specific infrastructure improvements and energy conservation measures, as appropriate. Project applicants would be required to provide for the needs of their individual projects, thereby contributing to the natural gas infrastructure in the service area.

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.

Based on the above: (1) the Project's contribution to cumulative impacts with respect to new or expanded 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 new or expanded 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 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 new or expanded 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, and the impact levels remains less than significant.