

IV. Environmental Impact Analysis

J.2 Utilities and Service Systems—Energy Infrastructure

1. Introduction

The following section analyzes the proposed 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 1000 Seward Project* prepared by Eystone Environmental, and the *1000 Seward Mixed-Use Project Utility Infrastructure Technical Report: Energy* (Utility Report) prepared by LFA Consulting Engineers (January 2022), which are included as Appendix D and Appendix E of this Draft EIR, respectively.

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.

(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, reliability of the electric grid and approving of 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 falls 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.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 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 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

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

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

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 2017 Power Strategic Long-Term Resources Plan, LADWP has a net dependable generation capacity greater of 7,880 MW.² In 2017, the LADWP power system experienced an instantaneous peak demand of 6,432 MW.³ Approximately 37 percent of LADWP's 2020 electricity purchases were from renewable sources, which is greater than the 33 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. 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] Version 2020.4.0). It is estimated that existing uses on the Project Site currently consume approximately 250,598 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 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

² LADWP, *2017 Power Strategic Long-Term Resources Plan*.

³ LADWP, *2017 Retail Electric Sales and Demand Forecast*, p. 6.

⁴ LADWP, *2020 Power Content Label*.

⁵ *Eyestone Environmental, Energy Calculations for the 1000 Seward Project*. See Appendix D of this Draft EIR.

⁶ SoCalGas, *Company Profile*, www.socalgas.com/about-us/company-profile, accessed September 11, 2020.

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. The Rocky Mountain supply is available but is used as an alternative supplementary supply source, and the use of Canadian sources provide only a small share of SoCalGas supplies due to the high cost of transport.⁸ 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).⁹

SoCalGas supplies natural gas to the Project Site from natural gas service lines located in the Project vicinity. It is estimated that existing uses on the Project Site currently consume approximately 642,485 cf of natural gas per year.¹⁰

3. Project Impacts

This analysis addresses the Project's potential impacts on electricity and natural gas infrastructure. The Project's estimated energy consumption was calculated using CalEEMod Version 2020.4.0.

a. Thresholds of Significance

In accordance with Appendix G to 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

In assessing impacts related to energy infrastructure in this section, the City used Threshold (a) from Appendix G as the threshold of significance. The factors and

⁷ California Gas and Electric Utilities, 2020 California Gas Report, p. 111.

⁸ California Gas and Electric Utilities, 2020 California Gas Report, p. 111.

⁹ California Gas and Electric Utilities, 2020 California Gas Report, p. 111.

¹⁰ Eyestone Environmental, Energy Calculations for the 1000 Seward Project. See Appendix D of this Draft EIR.

¹¹ 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, Utilities and Service Systems—Water Supply and Infrastructure, of this Draft EIR for a discussion of water infrastructure.

considerations identified below from the *L.A. CEQA Thresholds Guide* were 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 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 E 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 2020.4.0. 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.C, Energy, and Appendix D 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's 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 E 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.D, Greenhouse Gas Emissions, of this Draft EIR.

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. During Project construction activities, electricity usage represents two percent of the estimated net annual Project operational demand, which as described below, LADWP's existing electrical infrastructure currently has enough capacity to provide service for construction activities. Moreover, construction electricity usage would be substantially lower than the current demand for electricity with respect to the existing on-site uses, so that the existing electrical infrastructure is sufficient to accommodate construction activity. Temporary power poles may be installed to provide electricity during Project construction. Existing off-site infrastructure would not have to be expanded or newly developed to provide electrical service to the project during construction or demolition.

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 grading, construction, and development 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

¹² 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, Utilities and Service Systems—Water Supply and Infrastructure, of this Draft EIR for a discussion of water infrastructure.

Project is not anticipated to 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 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 off-site infrastructure improvements to serve the Project Site. Construction impacts associated with the installation of natural gas connections would not result in impacts as they are expected to be conducted consistent with the construction management plan requiring minimal construction work and 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 the Project's impact would therefore be less than significant.**

(b) Operation

(i) Electricity

As shown in Table IV.C-2 in Section IV.C, Energy, of this Draft EIR, the Project's net operational electricity usage would be 2,820,104 kWh per year, which is less than 0.01 percent of LADWP's projected sales in the 2025–2026 fiscal year.¹³ In addition, during peak conditions, the Project would represent approximately 0.01 percent of the

¹³ LADWP, 2017 Power Strategic Long-Term Resources Plan, December 2017, Appendix A, Table A-1.

LADWP estimated peak load. As discussed in the Utility Report, LADWP has confirmed that the Project's electricity demand can be served by the facilities in the Project area.¹⁴ 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, during Project operations, it is anticipated that LADWP's existing and planned electricity capacity and electricity supplies would be sufficient to support the Project's electricity demand, and the Project's impact would therefore be less than significant.**

(ii) Natural Gas

As shown in Table IV.C-2 in Section IV.C, Energy, of this Draft EIR, the Project would consume 3,374,502 cf per year, which represents approximately 0.0004 percent of the 2025, forecasted consumption in the SoCalGas planning area. SoCalGas has confirmed that the Project's natural gas demand can be served by the facilities in the Project area.¹⁵ 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. **Therefore, it is anticipated that SoCalGas' existing and planned natural gas supplies would be sufficient to support the Project's net increase in demand for natural gas, and the Project's impact 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.**

¹⁴ LFA Consulting Engineers, 1000 Seward Mixed-Use Project Utility Infrastructure Technical Report: Energy, page 9, January 2022. Refer to Appendix E of this Draft EIR.

¹⁵ LFA Consulting Engineers, 1000 Seward Mixed-Use Project Infrastructure Technical Report: Energy, page 10, January 2022. Refer to Appendix E of this Draft EIR.

(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, and the impact levels remain less than significant.

e. Cumulative Impacts

(1) Impact Analysis

(a) Electricity

Buildout of the Project, the 16 specific related projects located in the City of Los Angeles in the LADWP's service area and as listed in Table III-1 in Section III, Environmental Setting, of this Draft EIR, Related Project No 17, the Hollywood Community Plan Update, 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 23,537 GWh of electricity.^{16,17} In addition, LADWP has confirmed that the Project's electricity demand can be served by the facilities in the Project area.¹⁸ Data used to develop the LADWP demand forecasts take into account population growth, energy efficiency improvements, and economic growth which includes construction projects.¹⁹

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 2017 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

¹⁶ LADWP defines its future electricity supplies in terms of sales that will be realized at the meter.

¹⁷ LADWP, 2017 Power Strategic Long-Term Resources Plan, December 2017, Appendix A, Table A-1.

¹⁸ LFA Consulting Engineers, 1000 Seward Mixed-Use Project Infrastructure Technical Report: and Energy, January 2022. See Appendix E of this Draft EIR.

¹⁹ LADWP, 2017 Retail Electric Sales and Demand Forecast, p. 6.

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, construction and operation of the Project would not adversely affect the LADWP electrical grid.²⁰ **For these reasons: (1) the Project's 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

Buildout of the Project, the 16 related projects as listed in Table III-1 in Section III, Environmental Setting, of this Draft EIR, and additional forecasted growth in SoCalGas' service area would cumulatively increase the demand for natural gas supplies and infrastructure capacity. As stated above, the Project's estimated net increase in demand for natural gas is 3,210,490 cf per year, which translates to approximately 8,796 cf per day. SoCalGas has confirmed that the Project's natural gas demand can be served by the facilities in the Project area, and in general, each development project would be expected to comprise a similarly limited percentage of overall natural gas consumption.²¹ 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 at many of the development projects is likely accounted for in the SoCalGas projections.

²⁰ LFA Consulting Engineers, 1000 Seward Mixed-Use Project Infrastructure Technical Report: and Energy, January 2022. See Appendix E of this Draft EIR.

²¹ LFA Consulting Engineers, 1000 Seward Mixed-Use Project Infrastructure Technical Report: and Energy, January 2022. See Appendix E of this Draft EIR.

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. Development projects within its service area would also be anticipated to incorporate site-specific infrastructure improvements, 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. As the will-serve letter for the Project identified adequate infrastructure, construction and operation 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 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, and the impact levels remain less than significant.