

IV. Environmental Impact Analysis

M.2 Utilities and Service Systems—Energy Infrastructure

1. Introduction

The following section analyzes the Project's potential impacts upon electrical 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 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 2159 Bay Street Project* provided in Appendix E of this Draft EIR, and the *2159 Bay Street Dry Utility Due Diligence Report* (Dry Utility Report) provided in Appendix Q of this Draft EIR. 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 (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; 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 the 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 (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. The 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

(3) Local

There are no local regulations with respect to electricity and natural gas infrastructure. For a discussion of local regulations pertaining to energy conservation, refer to Section IV.C, Energy, of this Draft EIR.

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

b. Existing Conditions

(1) Electricity

LADWP provides electrical service throughout the City of Los Angeles (City) 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. Electrical service provided by 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's latest plan), the LADWP has a net dependable generation capacity greater than 7,531 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 statewide percentage of approximately 33 percent electricity purchases from renewable sources.⁴

According to Google Earth street views and the Dry Utility Report included as Appendix Q of this Draft EIR, there are existing overhead power lines running along the north sides of both Bay Street and Sacramento Street that currently provide power to the Project Site. There is no existing electricity generation on-site including coal, natural gas, solar, geothermal, wind, or hydropower. Existing electricity usage was estimated based on the same methodology contained in the GHG analysis included in Section IV.E, Greenhouse Gas Emissions, of this Draft EIR (California Emissions Estimator Model (CalEEMod) Version 2020.4.0). It is estimated that the existing 39,328 square feet of light industrial and creative office floor area at the Project Site currently generate a demand for approximately 550,336 kilowatt hours (kWh) of electricity per year.⁵

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

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

⁴ LADWP, 2020 Power Content Label, October 2020.

⁵ See Section IV.C, Energy, and Appendix E, Energy Calculations for 2159 Bay Street Project, of this Draft EIR for detailed calculations.

(2) Natural Gas

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.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. 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 87 million cubic feet (cf) per day in 2020 (the most recent year for which data are available).⁹

According to the Dry Utility Report included as Appendix Q of this Draft EIR, SoCalGas currently provides natural gas to the Project Site from an existing 2-inch gas line running along Bay Street, and there are currently SoCalGas lines running along Sacramento Street adjacent to the Project Site. Existing natural gas usage was estimated based on the same methodology contained in the GHG analysis included in Section IV.E, Greenhouse Gas Emissions, of this Draft EIR. It is estimated that existing uses on the Project Site currently create a demand for approximately 508,715 cf of natural gas per year.¹⁰

3. Project Impacts

This analysis addresses the Project's potential impacts on electricity and natural gas infrastructure.

⁶ SoCalGas, *Company Profile*, www.socalgas.com/about-us/company-info.shtml, accessed January 6, 2022.

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, *2021 Supplemental California Gas Report*, p. 28.

¹⁰ See Section IV.C, Energy, and Appendix E, Energy Calculations for 2159 Bay Street Project, of this Draft EIR for detailed calculations.

a. Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to electricity and natural gas 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 listed above is relied upon. The analysis utilizes factors and considerations identified in the City's 2006 *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?

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 Appendix Q 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 construction, energy would be consumed in the form of electricity associated with conveyance of water, lighting and other construction activities necessitating electrical power. Construction activities typically do not involve the consumption of natural gas. Operational energy consumption would include electricity and natural gas from uses such as heating/ventilation/air conditioning (HVAC); water heating,

¹¹ Refer to Section IV.G, *Hydrology and Water Quality*, of this Draft EIR for a discussion of stormwater impacts; Section IV.M.1, *Water Supply and Infrastructure*, of this Draft EIR for a discussion of water infrastructure; and Section VI, *Other CEQA Considerations*, of this Draft EIR for a discussion of wastewater and telecommunications facility impacts.

cooking, lighting, and use of electronics/appliances. Additional details regarding Project energy usage are provided in Section IV.C, 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., full buildout of the Project) to determine if these two energy utility companies would be able to meet the Project's energy demands.¹² Finally, the ability of the existing local infrastructure to accommodate the Project's estimated electricity and natural gas demand was assessed based on the Dry Utility Report and will-serve letters, included in Appendix Q of this Draft EIR.

c. Project Design Features

The following project design feature is proposed with regard to energy infrastructure:

Project Design Feature EI-PDF-1: A 34.5 kV electrical line meeting LADWP standards will be extended from the west along the north side of Bay Street to serve the Project.

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?¹³

¹² For purposes of conservatively analyzing construction and operational impacts, it was assumed that the Project construction would be completed as early as 2025. Energy efficiency standards applicable to construction equipment, Project buildings and vehicle trips are expected to improve over time. If construction of the Project were to be delayed, energy usage would be lower energy efficiency improves. Therefore, by assuming an accelerated construction schedule, the estimate of Project construction and operational energy usage is considered conservative.

¹³ Refer to Section IV.G, Hydrology and Water Quality, of this Draft EIR for a discussion of stormwater impacts; Section IV.M.1, Water Supply and Infrastructure, of this Draft EIR for a discussion of water infrastructure; and Section VI, Other CEQA Considerations, of this Draft EIR for a discussion of wastewater and telecommunications facility impacts.

(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 would be an estimated 22,797 kWh (see Section IV.C, Energy, of this Draft EIR for calculations). This would represent only approximately 4.1 percent of the 550,336 kWh of electricity currently used annually by the existing on-site uses which would be removed during construction. Hence, removal of the existing on-site uses would more than offset the electricity demand to be created by Project construction activities. Furthermore, existing power lines along Bay Street and Sacramento Street already provide electricity to the Project Site, and while temporary on-site power poles could potentially be required during construction, any such temporary pole installation would occur in coordination with LADWP. Existing off-site infrastructure would not have to be expanded or newly developed to provide electricity to the Project Site during construction or demolition.

With regard to existing electrical distribution lines, the Applicant would be required to coordinate electrical infrastructure removals, relocations and extensions 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. As discussed under Existing Conditions above, there are existing utility poles near the site running along Bay Street and Sacramento Street which would be able to supply electricity to the site. As discussed in the Dry Utility Report, the LADWP would be required to add a new 34.5 kV line along Bay Street and a new steel pole to serve the Project. These improvements would upgrade the existing line along Bay Street, which is located within a fully urbanized area, with any associated temporary traffic impacts to be mitigated with implementation of the Construction Management Plan and Worksite Traffic Control Plan outlined in Project Design Feature TR-PDF-1 in Section IV.K, Transportation, of this Draft EIR. Hence, no significant environmental effects or major disruptions to electrical service to the area are anticipated. As such, construction of the Project is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

(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 activities. Furthermore, 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 (i.e., the Dry Utility Report indicates that there are existing natural gas lines along Bay Street and Sacramento Street, and the SoCal/Gas will-serve letter, included in Appendix Q of this Draft EIR, indicates that there is already natural gas infrastructure in the area to serve the Project). Construction impacts associated with the installation of natural gas connections are expected to be confined to trenching within an already fully urbanized area in order to place the lines below surface, with any associated traffic impacts to be mitigated with implementation of the Construction Management Plan and Worksite Traffic Control Plan outlined in Project Design Feature TR-PDF-1 in Section IV.K, Transportation, of this Draft EIR. Hence, no significant environmental effects are anticipated. 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.

*(b) Operation**(i) Electricity*

As shown in Table IV.C-2 in Section IV.C, Energy, of this Draft EIR, with the detailed calculations included in Appendix E of this Draft EIR, the Project's operational electricity usage would be 4,266,959 kWh per year, which would be less than 0.02 percent of LADWP's projected sales in 2025 (the Project's full buildout year). In addition, during peak conditions, the Project would represent approximately 0.02 percent of the LADWP estimated peak load as shown in Section IV.C, Energy, of this Draft EIR. Furthermore, LADWP has confirmed in its will-serve letter, included in Appendix Q of this Draft EIR, that there is existing electricity infrastructure in the Project area to serve the Project, and the Dry Utility Report, included in Appendix Q of this Draft EIR, has confirmed that extending a 34.5 kV electrical line along Bay Street from the west would be adequate to serve the Project (required by Project Design Feature EI-PDF-1 above). Therefore, during Project operations, it is anticipated that LADWP's existing and planned electricity supplies, and its existing electricity infrastructure with the improvement identified above, would be adequate to serve the Project. Furthermore, the Project would provide the necessary electrical connections and on-site infrastructure required by LADWP to serve the Project, and all electricity infrastructure improvements would occur in consultation with LADWP and in compliance with LADWP requirements.

(ii) Natural Gas

As shown in Table IV.C-2, the Project would result the on-site demand for natural gas of approximately 3,252,133 cf per year (approximately 8,910 cf per day) which would represent approximately 0.0003 percent of the 2025 forecasted consumption in the SoCalGas planning area. Furthermore, SoCalGas has confirmed in its will-serve letter, included in Appendix Q of this Draft EIR, that there is existing natural gas infrastructure in the Project area to serve the Project, and the Dry Utility Report, included in Appendix Q of this Draft EIR, has confirmed that the existing 2-inch gas line on the north side of Bay Street can be used to serve the Project, and that gas facilities are also available in Sacramento Street. Therefore, it is anticipated that SoCalGas' existing and planned natural gas supplies, and its existing natural gas infrastructure, would be adequate to serve the Project. Furthermore, the Project would provide the necessary connections and on-site natural gas infrastructure to serve the Project, and all natural gas infrastructure improvements would occur in consultation with SoCalGas and in compliance with SoCalGas requirements.

(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 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 with regard to energy infrastructure 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) Electricity

Buildout of the Project, related projects, 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 2024-2025 fiscal year (the Project's full buildout year) will be 23,286 GWh of electricity.^{14,15} In addition, LADWP and the Dry Utility Report have confirmed that the Project's electricity demand can be served by the facilities in the Project area (with the proposed 34.5 kV electrical line extension along Bay Street).¹⁶ Data used to develop the LADWP demand forecasts take into account population growth, energy efficiency improvements, and economic growth which includes construction projects.¹⁷

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 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 other development projects in LADWP's service area is not known, it is expected that LADWP would provide for necessary improvements specific to each other 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

¹⁴ *California Gas and Electric Utilities, 2018 California Gas Report, p. 100.*

¹⁴ *LADWP defines its future electricity supplies in terms of sales that will be realized at the meter.*

¹⁵ *LADWP, 2017 Power Strategic Long-Term Resources Plan, December 2017, Appendix A, Table A-1.*

¹⁶ *LADWP, "Will-serve" letter from Ralph Jaramillo, dated March 30, 2018. Included in Appendix Q of this Draft EIR.*

¹⁷ *2017 Retail Electric Sales and Demand Forecast, City of Los Angeles Department of Water and Power, September 15 2017.*

electricity to a proposed project. As part of the “will-serve” letter process, LADWP ensures 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. **The Project’s contribution to cumulative impacts with respect to electricity infrastructure would not be cumulatively considerable and, thus, would result in a less than significant cumulative impact.**

(b) Natural Gas

Buildout of the Project, related projects, 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 demand for natural gas is 3,252,133 cf per year, or approximately 8,910 cf per day. SoCalGas and the Dry Utility Report have confirmed that the Project’s natural gas demand can be served by the facilities in the Project area, and in general, each future development project would be expected to comprise a similarly limited percentage of overall natural gas consumption.¹⁸ Moreover, SoCalGas identifies future planned infrastructure and forecasts demand through a variety of factors including the number of housing starts and gas meters installed, employment forecasts and increasing energy efficiency requirements.¹⁹ Therefore, natural gas usage resulting from future operations at many of the future development projects 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 future 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 identifies existing and planned future infrastructure in the service area to ensure adequate natural

¹⁸ SoCalGas, “Will-serve” letter for 2159 Bay Street Los Angeles, CA 90021 from Jason Jones, dated February 9, 2018. Included in Appendix Q of this Draft EIR.

¹⁹ California Gas and Electric Utilities, 2020 California Gas Report, 2020, p. 6.

gas service. 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.²⁰ **The Project's contribution to cumulative impacts with respect to natural gas infrastructure would not be cumulatively considerable and, thus, would result in a less than significant cumulative impact.**

(c) Conclusion

Based on the analysis provided above, the Project's contribution to cumulative impacts related to energy consumption (i.e., electricity and 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. As such, the Project's impacts would not be cumulatively considerable; therefore, cumulative energy infrastructure impacts are concluded to 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 remains less than significant.

²⁰ SoCalGas, "Will-serve" letter for 2159 Bay Street Los Angeles, CA 90021 from Jason Jones, dated February 9, 2018. Included in Appendix Q of this Draft EIR.