IV. Environmental Impact Analysis

M. Utilities and Service Systems—Electric Power Infrastructure

1. Introduction

The following section analyzes the proposed Project's potential impacts upon electric power 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. Potential impacts associated with energy demand and energy conservation policies are discussed in Section IV.E, Energy.

2. Environmental Setting

a. Regulatory Framework

There are several plans, policies, and programs regarding electric power 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, 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.

The Federal Communications Commission (FCC) requires all new cellular tower construction to be approved by the state or local authority for the proposed site and comply with FCC rules involving environmental review. Additionally, the Telecommunications Act of 1996 requires construction of new cellular towers to comply with the local zoning authority.

(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.E, 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). Public owned utilities such as the Los Angeles Department of Water and Power (LADWP) do not fall under the CPUCs 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 and larger. The CEC also has regulatory 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]

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

b. Existing Conditions

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 Site Locations are located within LADWP's Metropolitan and Valley Planning Districts.

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 Resource Plan (SLTRP), LADWP's latest power plan, LADWP has an installed 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, representing an all-time high peak for the system.[3] In addition, the system annual peak for 2018 was 6,195 MW.[4] Approximately 37 percent of LADWP's 2020 electricity purchases were from renewable sources, which is greater than the statewide percentage of 33 percent of electricity purchases from renewable sources.[5]

LADWP generates its electricity via 14 small hydroelectric plants, one large hydroelectric plant, five thermal plants, one wind plant, and two solar photovoltaic plants. LADWP supplies electricity within its service area through a transmission network that includes 3,507 miles of overhead and 124 miles of underground transmission lines and a distribution network that includes 6,752 miles of overhead and 3,626 miles of underground distribution lines.[6]

As part of TCN Program, a take-down component would be implemented including the removal of at least 110,000 square feet (2 to 1 square footage take-down ratio) of existing static displays. Signage to be removed would include at minimum approximately 200 static displays located within the City. Further, 200 existing static displays consume approximately 1,000,000 kWh of electricity per year.

---

[2] *LADWP, 2017 Power Strategic Long-Term Resource Plan, December 2017.*

[3] *LADWP, 2018 Retail Electric Sales and Demand Forecast, November 5, 2018.*

[4] *LADWP, 2018 Retail Electric Sales and Demand Forecast, November 5, 2018.*

[5] *LADWP, 2020 Power Content Labe, October 2020l.*

[6] *LADWP, 2017 Power Strategic Long-Term Resource Plan, December 2017.*

3. Project Impacts

a. Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the Project would have a significant impact related to electric power 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.

In assessing impacts related to electric power infrastructure in this section, the City uses Threshold (a) from CEQA Guidelines Appendix G as the threshold of significance.

b. Methodology

This analysis evaluates the potential impact of the Project on existing electric power infrastructure by comparing the estimated Project electricity demand with the existing available capacity of the local electricity infrastructure to satisfy this demand.

The Project's estimated operational electricity demand was calculated using CalEEMod Version 2020.4.0. The detailed CalEEMod electricity demand calculations are included in Appendix F of this Draft EIR.

c. Project Design Features

No specific project design features are proposed with regard to electric power infrastructure. However, the Project would implement a number of measures consistent with the Metro's 2019 CAAP which would reduce electricity consumption during operations. Such measures include use of 100 percent renewable energy by Year 2035 and use of LED lighting at Metro-owned properties.

d. Analysis of Project Impacts

As discussed in Section VI, Other CEQA Considerations, of this Draft EIR, and as evaluated in the Initial Study prepared for this Project, included in Appendix A of this Draft EIR, the Project is not anticipated to adversely affect the following utilities including water and wastewater treatment, storm water drainage, natural gas and telecommunications facilities as a result of either construction or operation of the Project. Therefore, as determined in the Initial Study, the potential impact the above listed utilities during

construction and operation of the Project would be less than significant. Further analysis is provided in Section VI, Other CEQA Considerations.

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?

(1) Impact Analysis

(a) Construction

Construction activities at the Site Locations would require minimal electricity for lighting and equipment. Furthermore, short-term and intermittent energy usage during construction is generally far less than ongoing usage during a project's operational phase; thus, operational demands are the primary means for analyzing infrastructure capacity. Overall, demolition and construction activities would require minimal electricity consumption as compared to the existing energy usage for the existing static displays. Specifically, as discussed in Section IV.E, Energy, of this Draft EIR, Project construction activities are estimated to consume a total of 15,376 kWh of electricity as compared to the existing consumption of 1,000,000 kWh annually for 200 existing static displays. Accordingly, Project construction would not have an adverse impact on existing electricity infrastructure.

With regard to electrical distribution lines, the Applicant would be required to coordinate any electrical infrastructure removals or relocations with LADWP and comply with site-specific requirements as part of the connection permit process. This would ensure that potential service disruptions and impacts to existing electricity infrastructure associated with Project construction activities would be minimized. As such, Project construction activities would not adversely affect the existing electrical infrastructure serving the surrounding uses.

Lastly, construction impacts associated with the Project's electrical infrastructure upgrades would primarily be confined to minor trenching to connect to existing electrical LADWP connection points. Infrastructure improvements would comply with all applicable LADWP, Metro, and City requirements. In addition, while off-site construction activities would be required to connect the existing off-site electricity lines to the proposed on-site electrical infrastructure, any such activities would be temporary, and would occur within developed areas. In general, the environmental effects associated with on-site construction activities, including the installation of electricity system improvements, are accounted for in the impact analyses throughout this Draft EIR, as appropriate. The Project would be required to comply with the provisions of the Metro Green Construction Policy and the Los Angeles Green Building Code. Such provisions include use of Tier 4

construction equipment, limit idling of trucks, maintain buffer zones, scheduling activities to off-peak hours, and use of electric pole power instead of diesel generators, as feasible. For the reasons discussed above, construction of electric power connections required to serve the Project would not cause significant environmental effects.

Based on the above, construction of the Project would not result in an increase in demand for electricity that exceeds the existing available supply or distribution infrastructure capabilities such that construction of new energy facilities or expansion of existing facilities would be required, the construction of which could cause significant environmental effects. Therefore, this impact would be less than significant.

(b) Operation

As detailed in Table IV.E-2 in Section IV.E, Energy, of this Draft EIR, the Project is anticipated to result in a net new on-site demand for electricity totaling 2,288,691 kWh per year when accounting for removal of the existing static displays, would represent less than 0.1 percent of LADWP's projected sales in 2025. In comparison to the LADWP power grid base peak load of 5,820 MW in 2017, the Project Site net energy demand would represent 0.012 percent of the LADWP base peak load conditions. This demand would not significantly affect the ability of LADWP to accommodate peak electrical demands. Furthermore, the Project would include the installation of any necessary new lines, connections, and upgrades required by LADWP to ensure adequate service to the Site Locations. Therefore, LADWP's existing and planned electricity capacity and electricity supplies would be sufficient to support the Project's operational electricity demand.

Based on the above, operation of the Project would not result in an increase in demand for electricity that exceeds the existing available supply or distribution infrastructure capabilities, such that there would be a need for new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Therefore, this impact would be less than significant.

(2) Mitigation Measures

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

(3) Level of Significance After Mitigation

Project-level impacts related to electric power infrastructure were determined to be less than significant without mitigation. Therefore, no mitigation measures are required, and the impact levels remains less than significant.

f. Cumulative Impacts

Cumulative impacts occur when the incremental effects of a proposed project are significant when combined with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. Due to the site-specific nature, impacts to electric power infrastructure would be specifically assessed on a project-by-project basis or for a particular localized area. Therefore, as with the Project, related projects would address potential site-specific impacts to electric power infrastructure through the implementation of site-specific recommendations and/or mitigation measures.

(1) Impact Analysis

(a) Electricity

The geographic context for the cumulative impact analysis on electric power infrastructure is the vicinity of the Site Locations; specifically, the area served by the same electric power infrastructure as the Project. Buildout of the Project, related projects and additional forecasted growth in LADWP's service area together would cumulatively increase the demand for electricity supplies and infrastructure capacity. LADWP forecasts that its energy sales in the 2025–2026 fiscal year (2025 being the Project's earliest buildout year) will be an estimated 23,537 GWh of electricity.[7] Data used to develop the LADWP demand forecasts take into account population growth, energy efficiency improvements, and economic growth which includes future construction projects.[8] LADWP indicated in its 2017 Power Strategic Long-Term Resources Plan that it has adequate electricity supplies to meet the projected demand within its service area during the 2025-2026 fiscal year and beyond.[9]

Electricity supply and infrastructure are typically expanded in response to increasing demand, and system expansion and improvements by LADWP are ongoing. LADWP would continue to expand supply and delivery capacity as needed to meet demand increases within its service area. 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 anticipated changes in regulatory requirements. Development projects within the LADWP service area would also be anticipated to incorporate site-specific infrastructure improvements, as necessary.

---

[7] *LADWP, 2017 Power Strategic Long-Term Resource Plan, December 2017, Appendix A, Table A-1, p. A-6.*

[8] *LADWP, 2018 Retail Electric Sales and Demand Forecast, November 5, 2018.*

[9] *LADWP, 2017 Power Strategic Long-Term Resource Plan, December 2017, Appendix A, Table A-1, p. A-6.*

Furthermore, other development projects would be similarly expected to incorporate energy conservation features, comply with applicable regulations, including the CALGreen Code and state energy standards under Title 24, and incorporate mitigation measures, as necessary.

LADWP would coordinate with the related projects to provide any necessary electric power infrastructure improvements specific to each development project. The related projects would be reviewed by LADWP to identify necessary power facilities and service connections to meet their respective needs. The related projects would be required to provide the necessary infrastructure and system improvements for their individual projects, thereby contributing to the electrical infrastructure in the service area.

Based on the above, 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. The cumulative impact of the Project's incremental effect and the effect of the related projects relative to new or expanded electric powerinfrastructure would be less than significant.

(2) Mitigation Measures

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

(3) Level of Significance after Mitigation

Cumulative impacts related to electric power infrastructure were determined to be less than significant without mitigation. Therefore, no mitigation measures are required, and the impact levels remains less than significant.