Section 3.5
Energy

SECTION SUMMARY

This section describes existing marine transportation within the Port and identifies potential impacts on energy consumption and conservation that would result from the implementation of the Proposed Project or an alternative.

Section 3.3, Energy, provides the following:

- a description of energy-consuming elements of the Proposed Project;
- the environmental setting with respect to energy in the Port;
- a summary of existing regulations and policies associated with energy consumption;
- an impact analysis of the Proposed Project and alternatives, focusing on the use of fuel and electricity during construction and operation.

This section does not consider potential effects of the Proposed Project or alternatives on local and regional utilities infrastructure; that is discussed in Section 3.12, Utilities.

Key Points of Section 3.5:

Although the operation of the Proposed Project would see overall increases in energy use because of increases of cargo, the Proposed Project would realize large decreases in per-cargo unit use of energy by enabling the Berths 121-131 Terminal to accommodate larger, more fuel-efficient vessels and to utilize electric-powered cranes at the expanded intermodal facility. The Proposed Project, by reducing per-unit energy use, would be consistent with state and local policies related to energy efficiency.

The two alternatives would not realize per-unit decreases in energy use as large as that of the Proposed Project. Both would be consistent with state and local policies related to energy efficiency, although not to the same extent as the Proposed Project because both the No Project and the No Federal Action alternatives would not accommodate larger, more fuel-efficient oceangoing vessels to call at the terminal and the No Project Alternative would not transition the intermodal railyard facility to electric-powered RMG cranes in place of diesel-powered mobile equipment.

3.5.1 Introduction

This section describes the energy consumption and conservation elements of the Proposed Project and alternatives and identifies potential impacts related to energy use that would occur as a result of implementation of the Proposed Project and alternatives.

The Proposed Project would reconstruct an existing marine container terminal in order to enable the terminal to accommodate the increased cargo volumes and larger vessels expected in the future. The primary feature of the Proposed Project and alternatives related to energy is the increase in future activity levels, compared to baseline activity, which would require increased use of energy in the form of electricity and natural gas for wharf cranes, lightingand the facility buildings, and increased use of liquid fuels for vessels, cargo handling equipment, trucks, and trains. However, for various reasons, operation of the proposed Project and alternatives would consume less energy per TEU of cargo than under baseline conditions.

The Proposed Project would handle approximately 1.871 million TEUs per year. The two alternatives (No Project and No Federal Action) would require less energy than the Proposed Project because they would handle less throughput (1.332 million TEUs per year) and require fewer truck and train trips than the Proposed Project, although they would require more vessel calls than the Proposed Project (Table 2-1 in Chapter 2).

3.5.2 Environmental Setting

3.5.2.1 Electrical Service

The Los Angeles Department of Water and Power (LADWP) provides electrical services to the Port, including the Proposed Project area, and has adequate generation capacity to serve the current customer load. LADWP has a total generating capacity of about 8,100 megawatts (MW) to serve a peak Los Angeles-area demand of about 6,500 MW (LADWP 2022a). In 2019 LADWP sold approximately 22,500 gigawatt-hours (GWh) of electricity (LADWP 2022a). As of 2019, renewable energy sources accounted for approximately one-third of LADWP's capacity (Table 3.5-1). This is expected to increase over time based on Senate Bill (SB) 100, "The 100 Percent Clean Energy Act of 2018", which established that 100% of all electricity in California must be obtained from renewable and zero-carbon energy resources by 2045 through the Renewables Portfolio Standard (RPS).

Table 3.5-1 California and LADWP Electrical Energy System Profiles, 2019

Fuel Type	California Power Mix	LADWP Power Mix
Coal	3%	21%
Large Hydroelectric	15%	3%
Natural Gas	34%	27%
Nuclear	9%	14%
Renewables (excl large hydro)	32%	34%
Other/Unspecified	7%	0%
Total	**100%**	**100%**

Sources: CEC 2021; LADWP 2022a; rounding accounts for discrepancy in totals.

LADWP produces periodic updates of its Power Strategic Long-Term Resource Plan (SLTRP), which anticipates load growth and includes plans for new generating capacity or demand-side management programs to meet SB 100's requirements. The most recent update, the SLTRP 2022 (LADWP 2022b) provides the most appropriate setting for the Proposed Project's electrical energy analysis. By 2045, largely as a result of increasing electrification of transportation, buildings, and industry, LADWP's annual load is expected to reach approximately 31,000 GWh, which is 50% greater than the 2019 load. The 2022 SLTRP identifies increases in generation and storage resources needed to ensure that system capacity remains adequate to meet forecasted consumption in LADWP's service area (LADWP 2022b). The SLTRP 2022 is also largely driven by Mayoral directives and City Council motions that instructed LADWP to prepare an SLTRP to achieve 100% carbon-free energy by 2035 for the City. Significant investments in renewables, energy storage, and transmission infrastructure will be necessary to achieve 100 percent carbon-free energy. In response, the LADWP and the Port are partnerning in implementing the Electrical Infrastructure Improvement Program to support the future power demand at the Port at an estimated cost of $500 million.

The industrial power station closest to the Port has four main 138-kilovolt (kV) supply lines, two from the Harbor Generating Station and two from North Wilmington. Several other electrical power cables are distributed throughout the Harbor area, including power lines within the Project area. The Project site's existing facilities are designed to step down the incoming 34.5 kV power to lower voltages for the wharf cranes, the Alternative Maritime Power (AMP) facilities, and general terminal uses, such as lights and buildings. In 2019, the terminal is assumed, on the basis of activity levels, to have consumed 7,797,200 MWh (megawatt-hours) of electricity. Significant upgrades to the receiving station, distribution lines, and electrical infrastructure would be implemented under the port-wide Electrical Infrastructure Improvement Program, including constructing new network stations at the Project site and other terminals.

3.5.2.2 Natural Gas Service

Nearly 90% of the natural gas consumed in California is imported (CEC 2023). Californians consumed 13,158 million therms of natural gas in 2019 (the last year for which data are available), which equates to approximately 1,315,800,000 million BTUs (MMBtu) (CEC 2020). Nearly 45% of the natural gas burned in California is used for electricity generation, 21% for residential uses, 25% for industrial uses, and 9% for commercial uses.

The Southern California Gas Company (SCGC) provides natural gas in the Proposed Project area. The 2021 Supplemental California Gas Report recorded the average annual gas supply taken by SCGC in 2020 to be equivalent to 2,525 billion BTUs per day (California Gas and Electric Utilities 2021). As a public utility, SCGC is under the jurisdiction of the California Public Utilities Commission (CPUC) and can be affected by actions of federal regulatory agencies. The natural gas demand projections for Southern California are determined in large part by the long-term economic outlook for SCGC's service territory. Demand is expected to decline by approximately 1% per year through 2035 due to mandated demand-side management, renewable electricity goals, and declines in commercial and industrial demand (California Gas and Electric Utilities 2021). The report projected future average-year demand as equivalent to approximately 2,180 to 2,490 billion BTUs/day through 2035, compared to an available supply of 3,562 billion BTUs/day (California Gas and Electric Utilities 2021).

Approximately 1.2 MMcf of natural gas were consumed at the Berths 121-131 Terminal in 2019, which represents approximately 0.000013% of the total amount of gas supplied by SCGC to its customers in 2019.

3.5.2.3 Transportation Fuels

In 2019, taxable gasoline sales in California, including aviation gasoline, totaled approximately 15.4 billion gallons and diesel sales totaled approximately 3 billion gallons (CBE 2022a, b, although CARB [2020] estimates total usage of diesel in 2019 to be 4.5 billion gallons). These figures correspond to approximately 42 million gallons per day of gasoline and 8.2 million gallons per day of diesel fuel. Other transportation fuel sources used in California include alternative fuels, such as alcohol- and biomass-based fuels, natural gas (compressed or liquefied), hydrogen, and electricity, but these accounted for less than 3% of transportation energy demand in 2019 (CEC 2020).

The CEC's mid-range forecast for fossil fuels (i.e., gasoline and diesel) predicts a demand in California of approximately 16.4 billion gallons per yearby 2030 (CEC 2020). While the models show an increase in light-duty vehicles along with population and income growth over the forecast horizon, total gasoline consumption is expected to decline, primarily due to increasing fuel economy (stemming from federal and state regulations) and gasoline displacement from the increasing market penetration of zero emission vehicles (ZEVs). For diesel, demand is forecast to increase modestly (approximately 4%) by 2030, following the growth of California's economy, but would be tempered by an increase in fleet fuel economy and market penetration of alternative fuels, most prominently by natural gas in the medium- and heavy-duty vehicle sectors (CEC 2018, 2020).

In 2019 the Berths 121-131 Terminal is estimated, on the basis of activity levels, to have consumed 6,951,739 gallons of fossil fuels, primarily as diesel and marine diesel oil (MDO) but including small amounts of gasoline and LNG.

3.5.3 Applicable Regulations

Numerous federal, state, and local laws and regulations are in place that are applicable to energy conservation and efficiency. Responsibilities for enforcing or executing these laws and regulations are governed by various state and local agencies, as described below. These regulations may have direct or indirect effects, either currently or in the future, on the energy consumption of the Proposed Project or alternatives.

3.5.3.1 Federal

Energy Policy Act of 2005

The federal Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, federal tax credits are available for fuel-efficient appliances and products such as hybrid vehicles and energy-efficient buildings. Additionally, tax credits are given for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment. The Act also established the first renewable fuel volume mandate in the United States, requiring 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012.

The Energy Independence and Security Act of 2007 expanded the Renewable Fuel Standard program to include diesel and to increase the volume of renewable fuel required to be blended into transportation fuel to 36 billion gallons by 2022.

EPA and NHTSA Joint Rulemaking for Vehicle Standards (2011)

In 2011, the the U.S. Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) finalized regulations to reduce greenhouse gas emissions and improve fuel efficiency of medium- and heavy-duty vehicles, including large pickup trucks and vans, semi-trucks, and all types and sizes of work trucks and buses. In subsequent rulemakings the agencies extended the national program of fuel economy standards to medium- and heavy-duty vehicles of model years 2014-2018, including large pickup trucks and vans, semi-trucks, and all types and sizes of work trucks and buses.

3.5.3.2 State

Renewables Portfolio Standard

The Renewables Portfolio Standard (RPS) was established in 2002 under Senate Bill 1078, accelerated in 2006 under Senate Bill 107, and expanded in 2011 under Senate Bill 2. Qualifying renewables under the RPS include bioenergy such as biogas and biomass, small hydroelectric facilities (30 MW or less), wind, solar, and geothermal energy. The CPUC and the CEC jointly implement the RPS program. In September 2009, then-Governor Schwarzenegger continued California's commitment to the Renewable Portfolio Standard by signing Executive Order S-21-09, which directed the CARB under its AB 32 authority to enact regulations to help the state meet its RPS goal of 33% renewable energy by 2020.

SB 350 - Clean Energy and Pollution Reduction Act of 2015

SB 350, enacted on October 7, 2015, provides a new set of objectives in clean energy, clean air, and pollution reduction. The objectives include increasing the procurement of California's electricity from renewable sources from 33% to 50% by December 31, 2030, and doubling by 2030 the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

Senate Bill 100/Executive Order B-55-18

On September 10, 2018, Governor Brown signed Senate Bill 100, establishing that 100% of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also creates new standards for the Renewable Portfolio Standard (RPS) goals that were established by SB 350, increasing electricity from renewable sources from 50% to 60% by 2030 with specific interim targets. The updated RPS goals are considered achievable, since many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

On the same day that SB 100 was signed, Governor Brown signed Executive Order B-55-18 with a new statewide goal to achieve carbon neutrality (zero-net GHG emissions) by 2045 and to "maintain net negative emissions thereafter."

CARB Programs and Rules

CARB has promulgated a number of rules and regulations that affect the fuel economy of mobile sources (specifically, on-road vehicles and off-road equipment). Key examples include the Mobile Source Strategy, the Airborne Toxics Control Measure, and the In-Use Off-Road Diesel-Fueled Fleets

The 2020 Mobile Source Strategy (CARB 2020) is a framework that identifies the levels of cleaner technologies necessary to meet CARB's fuel economy goals and high-level regulatory concepts that would allow California to achieve the technology trajectories identified through scenario planning and, consequently, meet California's goals. Further, these concepts maximize the criteria pollutant reductions by going to zero-emission where feasible. Specifically, for medium- and heavy-duty vehicles, the scenarios call for the deployment of approximately 1.4 million medium- and heavy-duty zero-emission vehicles (ZEVs) in California by 2045. Statewide, the concepts in the 2020 Mobile Source Strategy could achieve criteria pollutant NO_x reductions of over 590 tons per day in 2037, and reduce mobile source fuel consumption by 9.5 billion gallons of gasoline and 3.0 billion gallons of diesel equivalent in 2045.

In 2004, the CARB adopted an Airborne Toxics Control Measure (ATCM) to Limit Diesel-Fueled Commercial Motor Vehicle Idling in order to reduce public exposure to diesel particulate matter emissions (Title 13 California Code of Regulations Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

CARB also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower, such as bulldozers and loaders, as well as many other self-propelled off-road diesel vehicles. The In-Use Off-Road Diesel-Fueled Fleets regulation adopted by CARB in 2007 and revised in 2022 aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models (Title 13, California Code of Regulations Section 2449). The original compliance schedule required full implementation by 2023 in all equipment for large and medium fleets and by 2028 for small fleets. The 2022 amendments are to be phased in beginning in 2024 with completion by the end of 2036. These amendments aim to further reduce emissions from the off-road sector by requiring fleets to phase-out the oldest and highest polluting off-road diesel vehicles, prohibiting the addition of high-emitting vehicles to fleets, and requiring the use of 99-100 percent renewable diesel fuel.

On March 15, 2021, CARB approved the final Advanced Clean Trucks Regulation which sets an accelerated schedule to transition medium and heavy-duty vehicles from Class 2b to Class 8 towards zero-emissions technologies. By 2035, 55% of sales of Class 2b through 3 trucks, 75% of Class 4 through 8 trucks, and 40% of truck tractors would need to be zero-emission vehicles. Cement-hauler trucks, which tend to be Class 8 vehicles, may be affected indirectly by this rule, shifting some of the fleet's fuel consumption to electricity, although the rule does not explicitly address this truck type.

In addition, the Advanced Clean Fleet Regulation (ACF) was proposed by CARB in April 2023 with the goal of achieving zero-emission truck and bus fleets by 2045 for

certain market segments such as government fleets, last mile delivery, and drayage applications. However, since the ACF rule did not receive a waiver by the USEPA, and California has recently withdrawn its request for a waiver, no emissions reduction credits from this rule, as well the ACT rule, were quantified in the analysis.

Executive Order N-79-20

In September 2020, Governor Newsom signed Executive Order N-79-20, which sets a new State goal that 100% of in-state sales of new passenger cars and trucks will be zero-emission by 2035; that 100% of medium- and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible; and by 2035 for drayage trucks; and that 100% of off-road vehicles and equipment will be zero emission by 2035 where feasible. This order calls upon state agencies including ARB, the CEC, the CPUC, the Department of Finance, and others to develop and propose regulations and strategies to achieve these goals, and it was the first step towards the development of some regulations recently adopted by CARB, such as the Advanced Clean Cars II, Advanced Clean Trucks and the Advanced Clean Fleets.

3.5.3.3 Local

Executive Directive No. 10

Executive Directive No. 10 was issued in 2007 to address the City's environmental stewardship practices. In particular, the directive requires City departments to create a "Statement of Sustainable Building Policies" that includes, among other elements, sustainable design and energy efficiency. City departments are required to submit annual sustainability reports to the Mayor's office.

Sustainable City pLAn/Green New Deal

In 2015 the City of Los Angeles developed the Sustainable City pLAn as a roadmap through 2035. The pLAn was updated in 2019 as the Green New Deal (City of Los Angeles 2019) with accelerated targets for renewable energy and more ambitious programs. The pLAn contains strategies to address current and future climate change impacts, including initiatives aimed at energy conservation. These include energy-efficient buildings, leadership in carbon reduction efforts, and changes in mobility policies, particularly zero-emissions goods movement goals.

Port of Los Angeles Green Building Policy

As described in Section 1.7.2.3, in 2007 the Los Angeles Board of Harbor Commissioners (BHC) adopted the Green Building Policy requiring Leadership in Energy and Environmental (LEED) Gold Rating as the minimum standard for new construction of most buildings of at least 7,500 square feet as well as the incorporation of solar power and best available technology for energy efficiency for all new Port buildings.

LAHD Sustainable Construction Guidelines

As part of LAHD's overall environmental goals and CAAP strategies and the San Pedro Bay Ports Clean Air Action Plan (CAAP) strategies, any construction at the Port must follow the Sustainable Construction Guidelines, adopted in February 2008 (LAHD 2009). The guidelines reinforce and require sustainability measures under construction contracts, addressing a variety of emission sources that operate at the Port during construction. Some

of these strategies reduce energy consumption from construction sources. Examples of sources affected include ships and barges used to deliver construction related materials, harbor craft, dredging equipment, haul and delivery trucks, and off road construction equipment. These Guidelines are further described in Appendix B1 Air Emissions.

3.5.4 Impacts and Mitigation Measures

3.5.4.1 Methodology

CEQA and its Guidelines require that project-level assessments include a discussion of potential energy impacts with emphasis on potential inefficient, wasteful, or unnecessary consumption of energy. Construction and operational energy usage calculations (electricity, natural gas, and mobile source fuel consumption) for construction and operation of the Proposed Project are described in Appendix B1.

Key energy-consuming elements of construction of the Proposed Project would consist of:

- Harbor craft associated with rock dike removal and placement, dredging, and dredge material disposal;
- Off-road construction equipment involved in wharf demolition and construction, intermodal railyard construction, and the installation of backlands improvements;
- On-road heavy-duty delivery and haulage vehicles; and
- Light-duty worker vehicles.

When analyzing operational use and efficiency, the most common metric is gallons of fuel used per unit of cargo throughput (in this case, per TEU). However, because the facility's energy use would be a mixture of liquid fuels, natural gas, and electricity, a more useful metric is BTU per TEU.

Operational energy consumption would result from:

- Container ship arrivals and departures;
- AMP (i.e., shore power) usage;
- Tugboat activity;
- Off-road cargo-handling equipment (wharf cranes, CHE; e.g., toppicks, RTGs and RMGs, forklifts);
- Drayage trucks transporting containers to and from the terminal;
- Locomotives switching and hauling intermodal railcars; and
- Light-duty worker vehicles.

3.5.4.2 Baselines

CEQA Baseline

Section 15125 of the CEQA Guidelines requires EIRs to include a description of the physical environmental conditions in the vicinity of a project that exist at the time of the NOP. These environmental conditions constitute the baseline by which the CEQA lead agency determines if an impact is significant. The CEQA baseline represents the setting at a fixed point in time. The CEQA baseline differs from the No Project Alternative (Alternative 1) in that the No Project Alternative addresses what is likely to happen at the Project site over time, starting from the existing conditions. Therefore, the No Project

Alternative allows for growth at the Project site that could be expected to occur without additional approvals, whereas the CEQA baseline does not.

For purposes of this Draft EIS/EIR, the CEQA baseline consists of calendar year 2019. The baseline conditions for the Proposed Project and alternatives are described in Section 2.7.1 and summarized in Table 2-1. In summary, in 2019, the Berths 121-131 Terminal encompassed approximately 186 acres, supported five container cranes at two vessel berths, accommodated 153 vessel calls, generated 160,000 drayage truck trips, and handled approximately 354,000 TEUs of containerized cargo.

NEPA Baseline

For purposes of this Draft EIS/EIR, the evaluation of significance under NEPA is defined by comparing the Proposed Project or other alternative to the NEPA baseline. The NEPA baseline conditions are described in Section 2.7.2 and summarized in Table 2-1. The NEPA baseline condition for determining significance of impacts includes the full range of construction and operational activities the applicant could implement and is likely to implement absent a federal action, in this case the issuance of a USACE permit. Significance under NEPA is defined by comparing the Proposed Project or the alternatives to the NEPA baseline.

Unlike the CEQA baseline, which is a fixed point in time, the NEPA baseline includes increases in operations for each study year (2027, 2036, and 2050/2062), which are projected to occur absent a federal permit. As described in Section 2.7.2, the NEPA baseline, for purposes of this Draft EIS/EIR, is the same as the No Federal Action Alternative, and includes no in-water work (wharf demolition and construction, dredging and disposal, crane installation). Only expansion of the West Basin Inrermodal Container Transfer Facility (WBICTF) railyard would occur, which would not change the physical or operational capacity of the Berths 121-131 Terminal. The NEPA baseline assumes that by 2062 the terminal would handle up to approximately 1,332,000 TEUs annually and accommodate 208 annual ships calls at two berths occupied by five wharf cranes.

3.5.4.3 Thresholds of Significance

CEQA Guidelines Appendix G suggests two criteria for determining the significance of impacts related to energy, and the NEPA analysis uses the same criteria. The Proposed Project or alternative would have a significant impact if it would:

EN-1: Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

EN-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.5.4.4 Impact Determination

Proposed Project

Impact EN-1: Would the Proposed Project result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction

As described in Section 2.6.1, construction of the Proposed Project would include demolition of the existing wharf and removal of piles at Berths 126-129, dredging of up to 310,000 cubic yards of sediments to deepen the berth, possible rock dike reconstruction, installation of piles and construction of a new wharf, installation of new wharf cranes, and landside improvements.

Energy (primarily as diesel fuel but including minor amounts of gasoline and electricity) would be used during construction of the Proposed Project. Table 3.5-1 shows the annual energy consumption in terms of fuel usage during the entire construction period (2026-2027). Diesel consumption during construction would be temporary, lasting for approximately 21 months, and would represent a tiny fraction (0.017%) of the approximately 8.2 million gallons of diesel fuel consumed in California each day (CBE 2022a, b). This project construction is necessary to achieve the overall project objective of accommodating forecasted cargo volumes and vessel sizes efficiently, and thus does not represent a wasteful or unnecessary use of energy. Construction would be consistent with the policies in the Port of Los Angeles' Sustainable Construction Guidelines, which require minimum engine emission standards for construction equipment in accordance with the San Pedro Bay Clean Air Action Plan (CAAP) and would incorporate the mitigation measures imposed on the Proposed Project in Section 3.2 (Air Quality) and Section 3.6 (Greenhouse Gases).

Table 3.5-1: Proposed Project Construction Fuel Usage

Category	Year	Fuel	Fuel Consumed (Gallons)
Off-road Construction Equipment	2026	Diesel	116,794
Waterborne Equipment, Harbor Craft, and OGVs		Diesel	131,287
On-road Construction-Related Vehicles		Diesel	457,214
Worker Vehicles		Gasoline	744
Off-road Construction Equipment	2027	Diesel	101,970
Waterborne Equipment, Harbor Craft, and OGVs		Diesel	36,634
On-road Construction-Related Vehicles		Diesel	16,080
Worker Vehicles		Gasoline	1,136
Total Construction - Diesel	**ALL**	**Diesel**	**859,979**
Total Construction - Gasoline	**ALL**	**Gasoline**	**1,880**

Note: energy consumption estimates are based on the Project construction activity and consider the mitigations related to Air
Quality that affect energy consumption as a co-benefit.

The Proposed Project would use electrical energy during construction, but much of it would be supplied by on-site generators, and the total amount, given the scale and duration of construction, would be insubstantial relative to regional capacity and demand.

Operation

By full operation in 2050 and thereafter, the Proposed Project would handle substantially more cargo than under baseline conditions. Accordingly, vessel, train, truck, and terminal equipment activity levels, and therefore energy use, would increase to accommodate the increased cargo volume.

The Proposed Project does not include any design features specifically related to energy conservation. However, several operational elements of the Proposed Project would reduce the use of fossil fuels. Specifically, the vessels calling at the Berths 121-131 Terminal would be larger and able to accommodate more cargo per vessel, which would translate to more energy efficient vessel operations. Vessels are also required to comply with the VSRP, which would reduce fuel use compared to maintaining normal cruising speeds in the approaches to Los Angeles Harbor, and to use AMP, which would also reduce fuel use. In addition, the Proposed Project includes installation of electric-powered RMG cranes to load and unload trains in the expanded intermodal facility. This feature would eliminate the use of diesel-powered CHE to accomplish that activity, thereby reducing diesel fuel consumption. Furthermore, the Proposed Project would be subject to the City of Los Angeles' sustainability and conservation goals and standards and to the requirements of the various federal and state energy conservation laws, regulations, and policies as described in Section 3.5.3, and would incorporate the mitigation measures imposed on the Proposed Project in Section 3.2 (Air Quality) and Section 3.6 (Greenhouse Gases).

The increase of three vessels per year would be insubstantial relative to baseline conditions but, as described in Section 2.6, the vessels calling at the terminal and navigating the harbor waters would be larger than under baseline conditions and would consume more fuel per vessel, although less per TEU of cargo.

As shown in Table 3.5-2, total operational energy use would increase with the increase in cargo throughput and associated equipment and vehicular activity. However, the increase in the use of petroleum-based energy sources (i.e., fuels) would not be proportional to the increase in cargo volumes because diesel-fueled terminal equipment and heavy-duty trucks are expected to be replaced by near-zero- and zero-emissions technology by 2035, consistent with the CAAP and with the federal, state, and local initiatives described in Section 3.5.3. Accordingly, while cargo volumes would increase more than fivefold, the consumption of fossil fuels would increase a little more than twofold. It must be noted that for purposes of quantification, it is assumed that ocean-going vessels, which represent almost half of the estimated fuel consumption, would be refueled entirely from California's fuel pool; this is conservative, as most vessels likely obtain the majority of their fuel overseas due to economic considerations.

The quantities of diesel and gasoline that would be consumed by the Proposed Project as shown in Table 3.5-2 would represent an insubstantial fraction (approximately 0.1%) of the California fuel supplies described in Section 3.5.2 and would therefore not have negative effects on those supplies.

Operational use of electricity would increase over baseline conditions, primarily through use of more powerful and more numerous wharf cranes, the addition of electric-powered

RMG cranes in the intermodal facility, and the increase in cargo throughput. Specifically, electric power demand would increase from 7,797 MWh (8 GWh) in 2019 to 48,944 MWh (49 GWh) in 2050. That future electrical usage would represent less than 0.02% of LADWP's 2045 supply of approximately 44,000 GWh, and therefore would not constitute a substantial burden on available capacity. Furthermore, LADWP is charged with maintaining sufficient capability to provide customers with a reliable source of power and will continue to do so with proper planning and development of facilities in accordance with the City Charter, using such mechanisms as the Strategic Long-Term Resources Plan (LADWP 2022b). In that plan, LADWP represents that electricity resources and reserves will adequately provide electricity to all its customers, including the Berths 121-131 Terminal, through at least 2045. In addition, the LADWP and Port are implementing the port-wide Electrical Infrastructure Improvement Program to upgrade the receiving station, distribution lines, and electrical infrastructure, including a new network stations at the Project site and at other terminal locations, at an estimated cost of $500 million with the goal of 100% renewable energy by 2035.

Overall, the energy consumed per TEU of cargo is expected to decrease somewhat over time as efficiency-increasing measures take effect. Furthermore, energy is a significant operating expense, and because energy can be assumed to become more expensive in the future, the terminal operator will take steps to avoid wasteful and unnecessary use of fuel and electricity.

Table 3.5-2: Proposed Project Operational Fuel Usage

Scenario	Source Type	Fuel Type, unit	Energy Consumed	Annual TEUs Handled	Energy Unit per TEU (gallons/TEU or kWh/TEU)*
Baseline 2019	OGVs	MDO/Diesel, gallons	3,646,612	**353,924**	
	Harbor Craft	MDO/Diesel, gallons	20,627		
	Trucks	Diesel/LNG, gallons	1,365,093		
	Locomotives (Line-haul and Switch)	Diesel, gallons	1,481,755		
	Cargo Handling Equipment	Diesel/LNG, gallons	412,309		
	Worker Vehicles	Gasoline, gallons	25,344		
	Total Fuels (gallons)	**gallons**	**6,951,739**		**19.64**
	Electricity Consumption	**kWh**	**7,797,200**		**22.03**
Project - Year 2050	OGVs	MDO/Diesel, gallons	5,618,345	**1,871,405**	
	Harbor Craft	MDO/Diesel, gallons	43,435		
	Trucks	Diesel/LNG, gallons	5,653,996		

Table 3.5-2: Proposed Project Operational Fuel Usage

Scenario	Source Type	Fuel Type, unit	Energy Consumed	Annual TEUs Handled	Energy Unit per TEU (gallons/TEU or kWh/TEU)*
	Locomotives (Line-haul and Switch)	Diesel, gallons	3,784,053		
	Cargo Handling Equipment	Diesel/LNG, gallons	906,974		
	Worker Vehicles	Gasoline, gallons	72,646		
	Total Fuels (gallons)	**gallons**	**16,079,449**		**8.59**
	Electricity Consumption	**kWh**	**48,944,241**		**26.15**

Note: energy consumption estimates are based on the Project activity and consider the mitigations related to Air Quality and GHGs that affect energy consumption as a co-benefit.

CEQA Impact Determination

Energy use during construction would represent a tiny fraction of the state's fuel supplies and usage, and that consumption would be necessary to accomplish construction. Operational energy use by the Proposed Project is projected to become more efficient over time (although electrical use per TEU would increase by somewhat less than 20%, fossil fuel use would decrease by nearly 60%) in response to increasing energy costs and compliance with federal, state, and local energy conservation programs. Accordingly, impacts related to energy use and conservation associated with construction and operation of the Proposed Project would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Energy use during construction would represent a tiny fraction of the state's fuel supplies and usage, and that consumption would be necessary to accomplish construction. As shown in Table 3.5-2, operational energy use by the Proposed Project would be lower on a per-TEU basis than that of the NEPA baseline. Operational energy use by the Proposed Project is projected to become more efficient over time in response to increasing energy costs and compliance with federal, state, and local energy conservation programs. Accordingly, impacts related to energy conservation associated with construction and operation of the Proposed Project would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact EN-2: Would the Proposed Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Construction

Construction of the Proposed Project would comply with the LAHD's Sustainable Construction Guidelines, which include a number of measures that would reduce energy use such as reducing construction vehicle and equipment idling, promoting use of latest-model engines (which tend to be more energy-efficient) in construction vehicles and equipment, and requiring the vessels delivering the wharf cranes and RMGs to comply with the VSRP. These measures reflect the goals, standards, and suggested control measures of the state and local regulations and programs described in Section 3.5.3, particularly the 2011 EPA/NHTSA rulemaking for heavy-duty trucks, CARB's initiatives that influence fuel economy, the City's Green New Deal (City of Los Angeles 2019) and Executive Directive 10, and the Port's Green Building Policy.

Operation

Operation of the Proposed Project would involve activity by oceangoing vessels, terminal equipment, trucks, and trains. These activities would be required by lease conditions and tariff provisions to comply with a variety of federal, state, and local programs and initiatives that promote or have a side benefit of increased fuel efficiency. These include, most notably, the CAAP (see Section 1.7.2.1), which contains strategies focusing on efficiency and infrastructure and energy resource planning, and which aligns with the California Sustainable Freight action plan. CAAP strategies include timeline goals for transitioning terminal equipment and drayage trucks to near-zero- and zero-emissions technology, continuation of the Clean Truck Program and the VSRP, and promoting improvements in oceangoing vessel and switching locomotive engine technology. Through this compliance, the Proposed Project would be consistent with the goals, standards, and suggested control measures of the state and local regulations and programs described in Section 3.5.3, particularly CARB's mobile source strategy and In-Use Off-Road Diesel-Fueled Fleets regulation, Executive Order N-79-20, and the City's Green New Deal.

CEQA Impact Determination

Because construction and operation of the Proposed Project would be consistent with the applicable state and local plans and policies relating to energy conservation, and the Project is expected to become more energy efficient over time (based on energy unit per TEU), impacts of the Proposed Project would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because, as described above, construction and operation of the Proposed Project would be consistent with the applicable state and local plans and policies relating to energy conservation, impacts associated with operation of the Proposed Project would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Alternative 1 – No Project

Under Alternative 1, none of the proposed construction activities, including wharf demolition and construction, dredging, crane installation, and railyard expansion, would occur, either in water or in backland areas.

Under the No Project Alternative, the existing Berths 121-131 Terminal would continue its existing operations, although throughput would gradually increase to the terminal's current maximum capacity of approximately 1,332,000 TEUs per year.

Impact EN-1: Would the No Project Alternative result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction

Under the No Project Alternative, no construction would occur.

Operation

Operation of Alternative 1 would involve similar activities as the Proposed Project, except that vessel traffic would involve more numerous and smaller vessels and train loading/unloading at the intermodal facility would continue to be performed by mobile CHE, initially diesel-powered until the transition to near-zero- and zero-emission CHE contemplated by the CAAP were to be completed.

As shown in Table 3.5-3, total operational energy use would increase with the increase in cargo throughput and associated equipment and vehicular activity. However, the increase in the use of petroleum-based energy sources is anticipated not to be proportional to the increase in cargo volumes because diesel-fueled terminal equipment and heavy-duty trucks are expected to be replaced by near-zero- and zero-emissions technology, consistent with the CAAP and with the federal, state, and local initiatives described in Section 3.5.3. Note that the calculations in Table 3.5-3 do not include additional energy savings that would be realized by the mitigation measures applied to the Proposed Project, as mitigation cannot be applied to the No Project Alternative.

Table 3.5-3: No Project Alternative Operational Fuel Usage

Scenario	Source Type	Fuel Type, Unit	Energy Consumed	Annual TEUs Handled	Energy Unit per TEU (gallons/TEU or kWh/TEU)*
Baseline 2019	OGVs	MDO/Diesel, gallons	3,646,612	**353,924**	
	Harbor Craft	MDO/Diesel, gallons	20,627		

Scenario	Source Type	Fuel Type, Unit	Energy Consumed	Annual TEUs Handled	Energy Unit per TEU (gallons/TEU or kWh/TEU)*
	Trucks	Diesel/LNG, gallons	1,365,093		
	Locomotives (Line-haul and Switch)	Diesel, gallons	1,481,755		
	Cargo Handling Equipment	Diesel/LNG, gallons	412,309		
	Worker Vehicles	Gasoline, gallons	25,344		
	Total Fuels (gallons)	**gallons**	**6,951,739**		**19.64**
	Electricity Consumption	**kWh**	**7,797,200**		**22.03**
No Project - Year 2050	OGVs	MDO/Diesel, gallons	6,465,062	**1,332,000**	
	Harbor Craft	MDO/Diesel, gallons	43,435		
	Trucks	Diesel/LNG, gallons	4,412,050		
	Locomotives (Line-haul and Switch)	Diesel, gallons	2,673,485		
	Cargo Handling Equipment	Diesel/LNG, gallons	1,550,860		
	Worker Vehicles	Gasoline, gallons	45,820		
	Total Fuels (gallons)	**gallons**	**15,190,713**		**11.40**
	Electricity Consumption	**kWh**	**32,079,454**		**24.08**

Note: energy consumption estimates are based on the No Project Alternative activity and consider the mitigations related to Air Quality and GHGs that affect energy consumption as a co-benefit.

The quantities of diesel and gasoline that would be consumed by Alternative 1 as shown in Table 3.5-3 would represent an insubstantial fraction (0.1%) of the California fuel supplies described in Section 3.5.2, and would therefore not have negative effects on those supplies.

Operational use of electricity would increase over baseline conditions, primarily as a result of increased vessel traffic employing AMP and additional use of the existing wharf cranes caused by increased cargo volumes. However, LADWP is charged with maintaining sufficient capability to provide customers with a reliable source of power and will continue to do so with proper planning and development of facilities in accordance with the City Charter, using such mechanisms as the Strategic Long-Term Resources Plan (LADWP 2022b). In that plan, LADWP represents that electricity resources and reserves will adequately provide electricity to all its customers, including the Berths 121-131 Terminal, through at least 2045.

In addition, the LADWP and Port are implementing the port-wide Electrical Infrastructure Improvement Program to upgrade the receiving station, distribution lines, and electrical infrastructure, including a new network stations at the Berths 121-131 Terminal and at other terminal locations, at an estimated cost of $500 million with the goal of 100% renewable energy by 2035.

Overall, the energy consumed per TEU of cargo is expected to decrease somewhat over time as efficiency-increasing measures take effect. Furthermore, energy is a significant operating expense, and because energy can be assumed to become more expensive in the future, the terminal operator will take steps to avoid wasteful and unnecessary use of fuel and electricity.

CEQA Impact Determination

Operational energy use by the No Project Alternative is projected to become more efficient over time in response to increasing energy costs and compliance with federal, state, and local energy conservation programs. Accordingly, impacts related to energy conservation associated with operation of Alternative 1 would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The impacts of the No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (Alternative 2 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

An impact determination is not applicable.

Impact EN-2: Would the No Project Alternative conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No construction would occur for the No Project Alternative. Operation of the No Project Alternative would involve activity by oceangoing vessels, terminal equipment, trucks, and trains. These activities would be required by lease conditions and tariff provisions to comply with a variety of federal, state, and local programs and initiatives that promote or have a side benefit of increased fuel efficiency. These include, most notably, the CAAP (see Section 1.7.2.1), which contains strategies focusing on efficiency, infrastructure and energy resource planning, and aligns with the California Sustainable Freight action plan. CAAP strategies include timeline goals for transitioning terminal equipment and drayage trucks to near-zero- and zero-emissions technology, continuation of the Clean Truck Program, and promoting improvements in oceangoing vessel and switching locomotive engine technology. Through this compliance, the No Project Alternative would be consistent with the goals, standards, and suggested control measures of the state and local regulations and programs described in Section 3.5.3, particularly CARB's mobile source

strategy and In-Use Off-Road Diesel-Fueled Fleets regulation, Executive Order N-79-20, and the City's Green New Deal.

CEQA Impact Determination

Because operation of the No Project Alternative would be consistent with the applicable state and local plans and policies relating to energy conservation, impacts associated with operation of the No Project Alternative would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The impacts of the No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (Alternative 2 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

An impact determination is not applicable.

Alternative 2 – No Federal Action

Alternative 2 is a NEPA-required no-action alternative for purposes of this Draft EIS/EIR. This alternative includes only those the activities that would occur absent a USACE permit, i.e., expansion of the WBICTF railyard in the terminal backlands. No dredging, dredged material disposal, pile removal or installation, wharf demolition or construction, or crane installation/extension would occur. These activities would not change the capacity of the existing terminal.

The No Federal Action Alternative differs from the No Project Alternative, above, only in the expansion of the WBICTF, which would not talke place under the No Project Alternative.

As explained in Section 2.9.1.2, CEQA impacts are being considered under the No Federal Action Alternative because actions subject to CEQA analysis (expansion of the WBICTF) would take place.

Impact EN-1: Would the No Federal Action Alternative result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction

Construction activities under Alternative 2 would include only backlands improvements. Energy (primarily as diesel fuel but including minor amounts of gasoline and electricity) would be consumed during construction of the WBICTF expansion by diesel-powered earthmoving and rail construction equipment and by supporting equipment (e.g., welders, lights, generators, and on-road haul trucks). Diesel consumption during construction would be temporary, lasting for approximately 21 months, and would represent a tiny

fraction (less than 0.023%) of the approximately 8.2 million gallons of diesel fuel consumed in California each day (CBE 2022a, b). This construction is necessary to provide an expanded railyard that would improve the efficiency of goods movement, and thus does not represent a wasteful or unnecessary use of energy. Construction would be consistent with the policies in the Port of Los Angeles' Sustainable Construction Guidelines, which require minimum engine emission standards for construction equipment in accordance with the CAAP.

Operation

Operation of Alternative 2 would involve similar activities as the Proposed Project and the No Project Alternative, except that vessel traffic would involve more numerous and smaller vessels than the Proposed Project, and train loading/unloading at the intermodal facility would be performed by electric-powered RMG cranes instead of the mobile CHE of the No Project Alternative.

As shown in Table 3.5-4, total operational energy use would increase with the increase in cargo throughput and associated equipment and vehicular activity. However, the increase in the use of petroleum-based energy sources is anticipated not to be proportional to the increase in cargo volumes because diesel-fueled terminal equipment and heavy-duty trucks are expected to be replaced by near-zero- and zero-emissions technology, consistent with the CAAP and with the federal, state, and local initiatives described in Section 3.5.3.

Table 3.5-4: No Federal Action Alternative Operational Fuel Usage

Scenario	Source Type	Fuel Type, unit	Energy Consumed	Annual TEUs Handled	Energy Unit per TEU (gallons/TEU or kWh/TEU)*
Baseline 2019	OGVs	MDO/Diesel, gallons	3,646,612	**353,924**	
	Harbor Craft	MDO/Diesel, gallons	20,627		
	Trucks	Diesel/LNG, gallons	1,365,093		
	Locomotives (Line-haul and Switch)	Diesel, gallons	1,481,755		
	Cargo Handling Equipment	Diesel/LNG, gallons	412,309		
	Worker Vehicles	Gasoline, gallons	25,344		
	Total Fuels (gallons)	**gallons**	**6,951,739**		**19.64**
	Electricity Consumption	**kWh**	**7,797,200**		**22.03**
No Federal Action - Year 2050 (NEPA Baseline)	OGVs	MDO/Diesel, gallons	6,465,062	**1,332,000**	
	Harbor Craft	MDO/Diesel, gallons	43,435		
	Trucks	Diesel/LNG, gallons	4,006,811		

Scenario	Source Type	Fuel Type, unit	Energy Consumed	Annual TEUs Handled	Energy Unit per TEU (gallons/TEU or kWh/TEU)*
	Locomotives (Line-haul and Switch)	Diesel, gallons	2,673,485		
	Cargo Handling Equipment	Diesel/LNG, gallons	645,552		
	Worker Vehicles	Gasoline, gallons	45,820		
	Total Fuels (gallons)	**gallons**	**13,880,165**		**10.42**
	Electricity Consumption	**kWh**	**36,647,053**		**27.51**

The quantities of diesel and gasoline that would be consumed by Alternative 2 as shown in Table 3.5-4 would represent an insubstantial fraction (0.08%) of the California fuel supplies described in Section 3.5.2 and would therefore not have negative effects on those supplies.

Operational use of electricity would increase over baseline conditions, primarily as a result of increased vessel traffic employing AMP and the use of electric-powered RMG cranes. However, the Los Angeles Department of Water and Power (LADWP) is charged with maintaining sufficient capability to provide customers with a reliable source of power and will continue to do so with proper planning and development of facilities in accordance with the City Charter, using such mechanisms as the Strategic Long-Term Resources Plan (LADWP 2022b). In that plan, LADWP represents that electricity resources and reserves will adequately provide electricity to all its customers, including the Berths 121-131 Terminal, through at least 2045.

In addition, the LADWP and Port are implementing the port-wide Electrical Infrastructure Improvement Program to upgrade the receiving station, distribution lines, and electrical infrastructure, including a new network stations at the Project site and at other terminal locations, at an estimated cost of $500 million with the goal of 100% renewable energy by 2035.

Overall, the energy consumed per TEU of cargo is expected to decrease somewhat over time as efficiency-increasing measures take effect. Furthermore, energy is a significant operating expense, and because energy can be assumed to become more expensive in the future, the terminal operator will take steps to avoid wasteful and unnecessary use of fuel and electricity.

CEQA Impact Determination

Operational energy use by the No Federal Action Alternative is projected to become more efficient over time in response to increasing energy costs and compliance with federal, state, and local energy conservation programs. Accordingly, impacts related to energy conservation associated with operation of Alternative 2 would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Energy use during construction would represent a tiny fraction of the state's fuel supplies and usage, and that consumption would be necessary to accomplish construction. Operational energy use by the No Federal Action Alternative is projected to become more efficient over time in response to increasing energy costs and compliance with federal, state, and local energy conservation programs. Furthermore, because the No Federal Action Alternative is the same as the NEPA Baseline, energy use would not differ from that of the baseline. Accordingly, there would be no impacts related to energy conservation associated with construction and operation of the No Federal Action Alternative under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impact.

Impact EN-2: Would the No Federal Action Alternative conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Construction

Construction of Alternative 2 (No Federal Action) would comply with the LAHD's Sustainable Construction Guidelines, which include a number of measures that would reduce energy use such as reducing construction vehicle and equipment idling, promoting use of latest-model engines (which tend to be more energy-efficient) in construction vehicles and equipment, and requiring the vessels delivering the RMG cranes to comply with the VSRP. These measures reflect the goals, standards, and suggested control measures of the state and local regulations and programs described in Section 3.5.3, particularly the 2011 EPA/NHTSA rulemaking for heavy-duty trucks, CARB's initiatives that influence fuel economy, and the City's Green New Deal.

Operation

Operation of the No Federal Action Alternative would involve activity by oceangoing vessels, terminal equipment, trucks, and trains. These activities would be required by lease conditions and tariff provisions to comply with a variety of federal, state, and local programs and initiatives that promote or have a side benefit of increased fuel efficiency. These include, most notably, the CAAP (see Section 1.7.2.1), which contains strategies focusing on efficiency, infrastructure and energy resource planning, and aligns with the California Sustainable Freight action plan. CAAP strategies include timeline goals for transitioning terminal equipment and drayage trucks to near-zero- and zero-emissions technology, continuation of the Clean Truck Program and the VSRP, and promoting improvements in oceangoing vessel and switching locomotive engine technology. Through this compliance, Alternative 2 would be consistent with the goals, standards, and suggested control measures of the state and local regulations and programs described in Section 3.5.3, particularly CARB's mobile source strategy and In-Use Off-Road Diesel-Fueled Fleets regulation, Executive Order N-79-20, and the City's Green New Deal.

CEQA Impact Determination

Because construction and operation of the No Federal Action Alternative would be consistent with the applicable state and local plans and policies relating to energy conservation, impacts would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because construction and operation of the No Federal Action Alternative would be consistent with the applicable state and local plans and policies relating to energy conservation, and would be the same as the NEPA Baseline, there would be no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

There would be no impact.

3.5.4.5 Summary of Impact Determinations

Table 3.5-5 summarizes the CEQA and NEPA impact determinations of the Proposed Project and alternatives related to energy conservation, as described in the detailed discussion above. This table is meant to allow easy comparison between the potential impacts of the Proposed Project and alternatives with respect to this resource.

For each impact threshold, the table describes the impact, notes the CEQA and NEPA impact determinations, describes any applicable mitigation measures, and notes the residual impacts (i.e., the impact remaining after mitigation). All impacts, whether significant or not, are included in this table.

Table 3.5-5: Summary Matrix of Potential Impacts and Mitigation Measures for Energy Conservation Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts	Impact Determination	Mitigation Measures	Impacts after Mitigation
Proposed Project	**EN-1:** Would the Proposed Project result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	No mitigation is required	NEPA: Less than significant
	EN-2: Would the Proposed Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	No mitigation is required	NEPA: Less than significant
Alternative 1 – No Project	**EN-1:** Would the No Project Alternative result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Not applicable	Mitigation not applicable	NEPA: Not applicable
	EN-2: Would the No Project Alternativeconflict with or obstruct a state or local plan for renewable energy or energy efficiency?	CEQA: Less than significant	No mitigation is required	CEQA: Less than significant
		NEPA: Not applicable	Mitigation not applicable	NEPA: Not applicable
Alternative 2 – No Federal Action	**EN-1:** Would the No Federal Action Alternative result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: No impact	No mitigation is required	NEPA: No impact
	EN-2: Would the No Federal Action Alternative conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	CEQA: Less than significant	No mitigation is required	CEQA: Less than significant
		NEPA: No impact	No mitigation is required	NEPA: No impact

3.5.4.6 Mitigation Monitoring

Neither the Proposed Project nor either of the alternatives would result in significant impacts related to energy conservation. Therefore, no mitigation measures are required.

3.5.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to energy conservation would occur during construction or operation of the Proposed Project or alternatives.