

4.7 ENERGY

4.7.1 INTRODUCTION

This section describes the Hyatt Place project's (project) potential effects on energy consumption and conservation, and outlines standard conditions of project approval. Information regarding energy was obtained through the following sources:

- California Energy Commission, 2017, 2018
- California Public Utilities Commission, 2019
- Half Moon Bay – Sustainability Implementation Plan, 2019
- City of Half Moon Bay Local Coastal Program & Land Use Plan, Chapter 5, 2021
- Hyatt Hotel Air Quality, Greenhouse Gas and Energy Assessment (Illingworth and Rodkin, Inc., 2020). Included in this EIR as **Appendix C**.
- Peninsula Clean Energy, 2019

Project consistency with the 2021 Local Coastal Land Use Plan (LCLUP) is analyzed and included below. The LCLUP was updated and adopted by City Council in October 2020 and certified by the California Coastal Commission (CCC) in April 2021. The updated LCLUP comprises the City's reexamined and updated policy approach for carrying out the Coastal Act in a manner that addresses changed conditions since certification of the 1996 LCLUP.

All documents referenced in the draft EIR are available via CD or weblink upon request. The location of the other reference materials is cited at the end of this section. Hard copies of the draft EIR are located at the City of Half Moon Bay, Planning Division, 501 Main St, Half Moon Bay, CA 94019.

Comments were received in response to the Notice of Preparation for this Environmental Impact Report (EIR), comments were submitted regarding the project's regional and statewide impacts on energy as follows:

- Existing building efficiency standards and whether the project will exceed these standards
- The project's consistency with California's renewable energy policies

4.7.2 EXISTING CONDITIONS

Energy Use and Supply

In 2017, California's total statewide electricity consumption was approximately 288,614 gigawatt-hours (GWh). Approximately 4,354 GWh of electricity were consumed in San Mateo County, of which approximately 2,831 GWh (65 percent) were consumed by the non-residential sector (CEC 2018a). Total natural gas consumption in 2017 was approximately 12,571 millions of therms statewide, and 211 millions of therms in San Mateo County. Natural gas consumption for the non-residential sector in San Mateo County comprised approximately 95 millions of therms (approximately 45 percent of the County's gas consumption¹).

The California Energy Commission (CEC) provides full forecasts for electricity, natural gas, and fuel every two years as part of the *Integrated Energy Policy Report* (IEPR) process. In 2030, it is estimated that Californians will consume up to 354,209 GWh of electricity and 14,190 millions of therms of natural gas (CEC 2018c). Gasoline demand is projected to decline each year through 2030 due to greater numbers of zero-emission vehicles and increasing fuel economy, with forecasted 2030 gasoline demand of up to 12.7 billion gallons; diesel demand is projected to increase modestly, following economic growth, to approximately 4.7 billion gallons in 2030.²

California's electric grid relies increasingly on clean sources of energy such as solar, wind, geothermal, hydroelectricity, and biomass. As this transition advances, the grid is also expanding to serve new sectors including electric vehicles, rail, and space and water heating. California has installed more renewable energy than any other state within the United States with 22,250 megawatts (MW) of utility-scale systems operational today.³ California's Renewables Portfolio Standard (RPS) is among the most ambitious energy policies in the nation, requiring utilities to produce 33 percent of their retail electricity from clean, renewable sources by 2020 and 50 percent by 2030.

¹ CEC, 2018b. "Gas Consumption by County." Available: <http://www.ecdms.energy.ca.gov/gasbycounty.aspx>. Accessed January 2022.

² California Energy Commission (CEC), 2017. Transportation Energy Demand Forecast, 2018-2030. November 2017. Available: <https://efiling.energy.ca.gov/getdocument.aspx?tn=221893>. Accessed January 2022.

³ CEC, 2018d. Toward a Clean Energy Future: 2018 Integrated Energy Policy Report Update Vol. 1. Available: <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2018-integrated-energy-policy-report-update>. Accessed: January 2022.

Electrical and Gas Services

Pacific Gas and Electric Company (PG&E) transmits and delivers electricity and natural gas to residents and businesses in San Mateo County, including the project site. PG&E obtains its energy supplies from power plants and natural gas fields through California, as well as energy purchased outside its service area and delivered through high voltage transmission lines and pipelines.⁴

The PG&E power mix (the percentages of fuel sources used to generate electricity) in 2017 is as follows:

- 20 percent natural gas
- 27 percent nuclear
- 33 percent renewables (wind, geothermal, biomass, solar, small hydroelectric)
- 18 percent large hydroelectric
- 2 percent unspecified

As of 2016, Peninsula Clean Energy (PCE) also provides electrical power to Half Moon Bay. While PCE is San Mateo County's official energy provider. Customers are able to opt out and continue to receive service from PG&E. PCE obtains its energy supplies from a variety of suppliers, including Direct Energy and through Power Purchase Agreements.⁵ Power is generated from various sources, including hydroelectric, biomass, wind, and geothermal plants; and is fed into the PG&E owned electrical grid system serving San Mateo County. PCE offers its customers two options for electricity use: ECOplus, the default option, and ECO100. The ECOplus option offers approximately 50 percent renewable energy and 90 percent carbon-free electricity, while ECO100 offers 100 percent renewable and carbon-free electricity at a one cent per kilowatt hour price increase.⁶

The 2017 PCE power mix for PCE's ECOplus option is:

- 53 percent renewable
 - 24 percent wind

⁴ Illingworth and Rodkin, Inc. 2019. Hyatt Hotel Air Quality, Greenhouse Gas and Energy Assessment.

⁵ Peninsula Clean Energy, 2019a. Where PCE's Power Comes From. Available: <https://www.peninsulacleanenergy.com/energy-sources/>. Accessed: January 2022.

⁶ Peninsula Clean Energy, 2019b. Energy Choices. Available: <https://www.peninsulacleanenergy.com/energy-choices/>. Accessed: January 2022.

- 29 percent biomass, geothermal, small hydroelectric, and solar
- 33 percent large hydroelectric
- 15 percent unspecified

Existing energy consumption on the project site includes consumption of fossil fuels associated with vehicles traveling to and from the site vicinity. The project site is currently vacant, and there are very little existing vehicle trips to and from the site itself. Other than for annual fuel management (e.g., mowing), existing operational consumption of fossil fuels and vehicle trips is primarily associated with the auto dealership adjacent to the northern end of the site that is not a part of the project and is not included in this analysis.

4.7.3 REGULATORY SETTING

State

California's Energy Efficiency Standards for New Buildings, Title 24

The Energy Efficiency Standards for New Buildings were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 requires the inclusion of state-of-the-art energy conservation features in building design and construction, including the incorporation of specific energy-conserving design features, use of non-depletable energy resources, or a demonstration that buildings would comply with a designated energy budget.

Examples of energy measures in the Title 24 standards and the CALGreen Code include energy efficiency metrics and performance standards for appliances, space-conditioning equipment (i.e., heating, ventilation and air conditioning [HVAC]), water heating systems, windows and doors, insulation, lighting, and roofing materials; indoor and outdoor water use efficiency and conservation performance metrics; and requirements to provide solar-ready buildings with a minimum solar zone area (solar zone is defined as a section of the roof designated and reserved for the future installation of a solar electric or solar thermal system).

Project Consistency

As required by law, implementation of the project would comply with the most recent Energy Efficiency Standards of Title 24 by incorporating 'green building' and energy saving measures, specifically under the Leadership in Energy and Environmental Design (LEED) checklist. According to the

California Energy Commission, the latest version of the Title 24 (2019) standards, which took effect on January 1, 2020, uses approximately 28 percent less energy for residential lighting, heating, cooling, ventilation, and water heating compared to the prior Title 24 (2017) standards.

California's Renewable Energy Portfolio Standard Program (Senate Bills 107 and 1078)

California's Renewables Portfolio Standard was established in 2002 under Senate Bill 1078, accelerated in 2006 under Senate Bill 107, and expanded in 2011 under Senate Bill 32. This program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

Project Consistency

This regulation does not require an evaluation of project consistency. However, it is important to note as the project would receive electricity from PG&E or from PCE, which are required to meet the renewable energy goal. PG&E procured 33 percent of their energy from renewable sources in 2017 and is currently under contract to procure 50 percent of their energy from renewable sources by 2030.⁷⁸ PCE uses 50 percent renewable energy, as of 2017.

California Air Resources Board On-Road and Off-Road Vehicle Regulations

In 2004, the California Air Resources Board (CARB) adopted an Airborne Toxic Control Measure 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

⁷ California Public Utilities Commission, 2019. California Renewables Portfolio Standard. Available: <https://www.energy.ca.gov/programs-and-topics/programs/renewables-portfolio-standard>. Accessed: January 2022.

⁸ Illingworth and Rodkin, Inc. 2019. Hyatt Hotel Air Quality, Greenhouse Gas and Energy Assessment.

also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

In addition to limiting exhaust from idling trucks, CARB also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The In-Use Off-Road Diesel-Fueled Fleets regulation adopted by CARB on July 26, 2007 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 (13 California Code of Regulations Section 2449). The compliance schedule requires full implementation by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

Project Consistency

All on-road and off-road construction and commercial equipment used during project construction would comply with the CARB On-Road and Off-Road Vehicle Regulations. Neither on-road nor off-road equipment would be allowed to idle for more than five minutes at a time. While intended to reduce construction criteria pollutant emissions, compliance with anti-idling and emissions reduction regulations would also minimize wasteful and unnecessary energy consumption during construction. Therefore, the project is consistent with this regulation.

California Assembly Bill No. 1493 (AB 1493, Pavley), (Chapter 200, Statutes of 2002)

Authored by Assembly Member Fran Pavley and enacted on July 22, 2002, these standards are intended to reduce GHG emissions for passenger vehicles, light duty trucks, and other vehicles whose primary use is noncommercial personal transportation manufactured in and after 2009. However, they also have the associated benefit of reducing energy consumption from the transportation sector by improving fuel economy and reducing fuel consumption as a means to reduce emissions. Referred to as the Pavley standards, implementation of AB 1493 was delayed due to litigation, but ultimately upheld by the Supreme Court. The standards established tailpipe GHG emissions standards for model year 2012 through 2016 light-duty vehicles under Phase I and model year 2017 through 2025 light-duty vehicles under Phase II.

The United States Environmental Protection Agency and United States Department of Transportation adopted federal equivalent standards for model year 2012 through 2016 light-duty vehicles and model year 2017 through 2025 light-duty vehicles. The federal standards are slightly different from the

Pavley Phase I and Phase II standards, but the State of California has agreed not to contest these standards, in part due to the fact that while the national standard would achieve slightly lower reductions in California, it would achieve greater reductions nationally and is stringent enough to meet State GHG emission reduction goals (CARB 2016). On November 15, 2012, CARB approved an amendment that allows manufacturers to comply with the national standards to meet State law.

Project Consistency

Construction related light-duty trucks would be required to meet State GHG emission laws either through adherence to the Pavley standards or federal standards.

Local

Half Moon Bay General Plan and Local Coastal Program

Half Moon Bay's General Plan has adopted elements for Noise, Safety, Parks and Recreation, Circulation, and Housing. In the time during which this EIR was prepared, there was no element addressing energy use, and no policies applicable to this topic. Energy conservation is anticipated to be addressed in the Open Space and Conservation Element of the General Plan, which has not yet been drafted.

The Half Moon Bay LCLUP and the Local Coastal Implementation Plan (IP) together constitute the "Local Coastal Program" (LCP) for the city. The LCLUP, which is the policy component of the LCP, contains policies for energy resources.

Project Consistency

As there are currently no General Plan elements addressing energy use in Half Moon Bay, project consistency with Half Moon Bay's General Plan is not applicable.

The policies described in **Table 4.7-1** are relevant to energy consumption.

Table 4.7-1 Project Consistency with Relevant LCLUP Policies

Coastal Act Plan Policy Number	Coastal Act Policy	Project Consistency
Coastal Act		
Section 30253.	<p>Minimization of adverse impacts new development shall do all of the following:</p> <p>(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.</p> <p>(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.</p> <p>(c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.</p> <p>(d) Minimize energy consumption and vehicle miles traveled.</p> <p>(e) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.</p>	<p>Consistent. Project implementation would include incorporation of several sustainability elements in an effort to reduce wasteful energy consumption. Mitigation intended to reduce energy consumption includes energy efficient design features of the project, such as glass solar panels on the roof.</p>
Circulation Element		
Action 3-3	<p>Greener Vehicle Provisions: Include in updates to the City's Engineering and Design Standards, Parking Ordinance, and other related regulations; provisions for electric-vehicle charging stations, priority parking for clean air vehicles, and other best practices related to greener vehicular transportation in commercial and multi-family development as well as in applicable public facilities.</p>	<p>Consistent. The project will provide a shuttle to promote greener transportation options.</p>

Coastal Act Plan Policy Number	Coastal Act Policy	Project Consistency
<i>LCLUP Chapter 5 Coastal Access and Recreation</i>		
5-55: EV Vehicle Facilities	Support installation of EV charging stations in all public parking areas and require EV charging stations in new non-residential and multifamily development.	Consistent. The project includes on-site EV charging stations.

Source: Half Moon Bay Local Coastal Program, 2021.

Half Moon Bay Relevant Plans

The City adopted the Half Moon Bay Sustainability Implementation Plan in November 2019, which includes general policies regarding sustainability and specific actions and project to be undertaken to implement those policies. Once of those actions is to prepare a Climate Action and Adaptation Plan (CAAP), which is currently underway and will be developed with community input and prioritization.

Project Consistency

The project is inconsistent with Half Moon Bay Sustainability Implementation Plan and incorporates many sustainability techniques in its design, which are described in **Chapter 3.0, Project Description** and later in this Section.

Building Electrification Ordinance

Adopted in early 2022, Half Moon Bay's Title 14 of the Half Moon Bay Municipal Code Building Electrification Ordinance will assist the State in reaching Senate Bill 32 goals. The Building Electrification Ordinance requires all new building constructions to be electric-only, with no gas or propane used in the new construction. Additionally, the Building Electrification Ordinance would require electric retrofits for various types of remodels, and require fuel gas lines to be capped/decommissioned in existing buildings by 2045.

4.7.4 IMPACTS AND MITIGATION MEASURES

Thresholds of Significance

The following thresholds of significance for energy consumption were derived from the *Environmental Checklist in the California Environmental Quality Act (CEQA) Guidelines Appendix G*. These thresholds of significance have been amended or supplemented, as appropriate, to address lead agency requirements and the full range of potential impacts related to this project.

An impact of the project would be considered significant and would require mitigation if it would meet one of the following thresholds of significance:

- Energy a)** Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- Energy b)** Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Methodology

This section analyzes the project's direct energy consumption⁹ and indirect energy consumption¹⁰ from three energy sources: electricity, natural gas, and transportation fuel. Fuel includes operational vehicle trips as well as the fuel necessary for project construction.

Traffic information used in this energy analysis was provided in the Transportation Impact Analysis (TIA) prepared by W-Trans in July 2020 (see **Appendix G**). For the operational analysis, the amount of petroleum fuel consumed was modeled using CalEEMod vehicle miles traveled¹¹ (VMT) projections and EMFAC2007¹² average fuel economy assumptions of 25.5 mpg in 2022 and 28.15 mpg in 2030. These models were used in tandem with peak and off-peak traffic data for existing (2019) and cumulative (2040) traffic volumes to calculate energy consumption. To capture the net increase in energy consumption attributable to the project, existing conditions are compared with projected energy consumption in 2040 without the project (cumulative condition) and against 2040 energy consumption with project implementation (cumulative plus project).

⁹ Direct Energy is defined as the amount of fuel consumed by vehicles over a period of time. Factors that influence fuel consumption include but are not limited to; speed, grade, intersection delay time, traffic density and changing fuel economy due to newer more fuel efficient vehicles on the road.

¹⁰ Indirect energy is defined as the remaining energy consumed to construct, operate and maintain the project. Indirect energy also includes the manufacture and maintenance of vehicles using the roadway.

¹¹ VMT is a measure used in transportation planning which quantifies the amount of travel for all vehicles in a geographic region over a given period of time, typically a one-year period. VMT is calculated by adding up all the miles driven by all the cars and trucks on all the roadways in a region.

¹² EMFAC2007 is the latest emission inventory model that calculates emission inventories for motor vehicles operating on roads in California. This model reflects the Air Resources Board's current understanding of how vehicles travel and how much they pollute.

The technical analysis for direct energy consumption used CalEEMod defaults, which include the 2016 Title 24 Building Standards. Indirect emissions from electricity were also computed in CalEEMod.

Energy usage during the construction phase, which is expected to occur over a 566-workday period, was calculated using CalEEMod defaults for types of equipment that would be used for construction activities. The model has a default rate based on PG&E's 2008 emissions rate, which was adjusted to account for PCE emissions rates. Details of the CalEEMod energy inputs and results can be found in the Air Quality, Greenhouse Gas and Energy Assessment prepared for the project (see **Appendix C**).

Discussion of Impacts

Energy a) *Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Construction

Less than Significant. Project construction would require energy for the manufacture and transportation of building materials, preparation and grading of the project site, and construction of the project. This would be a temporary use of energy necessary to construct the project.

As discussed in **Section 4.7.2, Existing Conditions**, above, the project's construction activities would be required to comply with CARB On-Road and Off-Road vehicle regulations, restriction on idling, emission standards, and other requirements for heavy duty diesel engines and alternative idle reduction technologies to limit the idling of diesel-fueled commercial motor vehicles. While intended to reduce construction criteria pollutants, compliance with CARB regulations would also result in efficient use of construction-related energy and the minimization or elimination of wasteful and unnecessary consumption of energy.

Because project construction would entail energy demands largely associated with equipment and transportation fuels, construction of the project would not increase demands on the electric power network during peak and base period demand periods. As a result, construction energy impacts would be considered temporary and considered less than significant

Operation

Less than Significant. The primary means of energy consumption during project operation would include vehicle travel, natural gas usage to heat

water and air in the building(s)¹³, and electricity usage associated with the project. In addition, there would be indirect electricity usage associated with the conveyance of water supplies to the project and wastewater produced by the project.

The project incorporates several sustainability elements to reduce wasteful energy consumption in Half Moon Bay. To achieve these sustainability efforts, the design strategy incorporates the prerequisites and credits required to obtain LEED Certified Status. LEED is a third-party international green building rating system that rates the performance of buildings and neighborhoods and is an indicator of building design sustainability. Due to costs, however, the project will not be formally seeking LEED certification.

The project would include glass solar panels, equivalent to two LEED points, as a sustainability element, which would generate approximately three percent of the electricity used on-site based on LEED renewable energy production point system. The project would also install high-efficiency lighting throughout the site (i.e., LED lighting fixtures). A Variable Refrigerant Flow (VRF) heating/air conditioning system may also be incorporated into the project and would result in an average of 39 percent in energy savings compared to conventional HVAC systems. Additionally, the project would use a grey water system from the laundry facility and be used for outdoor landscaping on the east side of the structures in the parking area, install low-flow plumbing fixtures, and use water-efficient irrigation systems. These inputs were applied to the CalEEMod model and are reflected in the energy mitigated outputs.

Based on the total project energy usage outlined in **Table 4.7-2**, the project's estimated energy demand in 2022 (9,528 MMBtu, which converts to approximately 3 GWh) represents an extremely small fraction, 0.00075 percent of the regional energy use (in 2017, San Mateo County consumed over 4,000 GWh of energy, which is expected to increase by 2022).

Therefore, the project's energy use would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project operation. This impact would be less than significant.

¹³ During preparation of the draft EIR, the City adopted a Building Electrification ordinance, which requires all new buildings to operate on electric-only energy, without the use of natural gas. While this analysis assumes the use of natural gas, the project is expected to be in compliance with the City ordinance. As such, this EIR overestimates consumption of energy resources, which are anticipated to be lower with compliance to the City's Building Electrification ordinance.

Table 4.7-2 Project Annual Operational Energy Demand

Energy Usage	Estimated Demand	2022 Demand (MMBtu)	2039 Demand (MMBtu)	Source
Natural Gas ²	3,314,520 kBtu	3,315	3,315	CalEEMod
Electricity				CalEEMod VMT and EMFAC2007 average fuel economy of 25.5 mpg in 2022 and 28.15 mpg in 2030.
Without sustainability elements	757,966 kWh	2,586	2,586	
With sustainability elements	443,825 kWh			
Vehicle travel (gasoline, diesel and electric vehicles)	1,051,091 annual miles travelled Consumption of 41,219 gallons (2022) And 37,339 gallons (2030) of gasoline	4,699	4,257	
Total Usage				
Without sustainability elements		10,600	10,158	N/A
With sustainability elements		9,528	9,086	

Source: Illingworth and Rodkin, 2020.

1 gallon of gasoline = 114,000 Btu = 0.114 MMBtu; MMBtu = one million British thermal units; VMT = vehicle miles travelled

2 During preparation of the draft EIR, the City adopted a Building Electrification ordinance, which requires all new buildings to operate on electric-only energy, without the use of natural gas. While this analysis assumes the use of natural gas, the project is expected to be in compliance with the City ordinance. Natural gas is not anticipated to be used for project operation in compliance to the City's Building Electrification ordinance.

Energy b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact ENG-1. The project would result in a conflict of the local plan for renewable energy and energy efficiency.

Less than Significant with Standard Condition. As discussed in **Section 4.7.3, Regulatory Setting**, implementation of the project would comply with all state regulations as required. The project design would comply with Title

24 standards through incorporating “green building” and other energy-saving measures, specifically through the LEED prerequisites, use of renewable PCE electrical power, and its building location, which is conveniently near multiple public transportation lines.

As stated above, all new buildings in the city are required to operate on electric-only energy, without the use of natural gas. While this analysis assumes the use of natural gas, the project is expected to be in compliance with the City ordinance. This is, in part, due to the project applicant’s adherence to **Standard Condition ENG-1**. Therefore, with adherence to **Standard Condition ENG-1**, the project would be constructed to operate on electric-only energy, and would be in compliance with the City ordinance.

Standard Condition ENG-1: City Electrification Ordinance.

The project will be constructed to operate on electric-only energy to comply with the City’s Building Electrification Ordinance.

Therefore, by complying with state and local energy policies, implementation of the project would result in a less than significant impact to State and local energy policies and plans.

4.7.5 CUMULATIVE IMPACTS

Cumulative impacts occur when two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Other projects in the area include past and present planned residential, commercial, and infrastructure development projects. See **Chapter 4.0, Setting, Impacts, and Mitigation Measures**, for the full list of cumulative projects within Half Moon Bay.

The cumulative setting for energy impacts is the regional energy distribution systems that serve the project site and Half Moon Bay. Development proposed as part of the build out of the City could increase energy demands on these systems. **Table 4.0-1 (Chapter 4.0, Setting, Impacts, and Mitigation Measures)** lists projects planned for development in Half Moon Bay.

However, as described in **Section 4.11, Land Use and Planning**, the project site is designated as Commercial - General in the LCLUP and is currently zoned for Planned Unit Development (PUD), for which there are no specific development standards, allowed uses, or development densities, although commercial use has been identified for this site for many years. However, the LCLUP update indicates that the site is proposed to be rezoned to Commercial – General (CG) as part of the future implementation of the

LCLUP. The CG zoning standards are used as an appropriate guide for this site because they are consistent with the LCLUP land use designation, and can also be accommodated by the PUD zoning. Because the land use proposed by the project indirectly supports its current and proposed zoning designation, the increases in energy consumption are aligned with the Half Moon Bay's energy consumption forecasts.

All current and future projects in Half Moon Bay would be subject to the same Title 24 green building requirements applied as part of the project. This would ensure that each project considers energy-saving design features to reduce energy consumed by each development. To meet Half Moon Bay's energy efficiency expectations, future projects would be encouraged to apply energy-saving measures similar to this project, such as implementation of the LEED Checklist and compliance with the Half Moon Bay CAAP under development. Therefore, the project in conjunction with past, present, and foreseeable projects, would not result in a cumulative impact.

4.7.6 REFERENCES

- California Energy Commission (CEC), 2017. *Transportation Energy Demand Forecast, 2018-2030*. November 2017. Available: <https://efiling.energy.ca.gov/getdocument.aspx?tn=221893>. Accessed January 2022.
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Pacific Gas and Electric (PG&E), 2018. Exploring Clean Energy Solutions. Available: https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page. Accessed: January 2022.

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Peninsula Clean Energy, 2019b. Energy Choices. Available: <https://www.peninsulacleanenergy.com/energy-choices/>. Accessed: January 2022.