Energy Consumption Assessment
TownePlace Suites Project

Chico, California

Prepared For:

Rich D. Guevarra, PE
NorthStar
111 Mission Ranch Blvd, Ste. 100
Chico, CA 95926

Prepared By:

55 Hanover Lane
Chico, CA 95926

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LIST OF ACRONYMS AND ABBREVIATIONS

APNs	Assessor's Parcel Numbers
CalEEMod	California Emissions Estimator Model
CAISO	California Independent System Operator
CARB	California Air Resources Board
CC	Community Commercial
CEC	California Energy Commission
CMU	Commercial Mixed-Use
CPUC	California Public Utility Commission
EO	Executive Order
EPS	Emissions Performance Standard
kv	Kilovolts
kWh	Kilowatt-Hours
MW	Megawatt
MWH	Megawatt Hour
PG&E	Pacific Gas and Electric
Project	TownePlace Suites Project
RPS	Renewables Portfolio Standard
SB	Senate Bill
SR	State Route

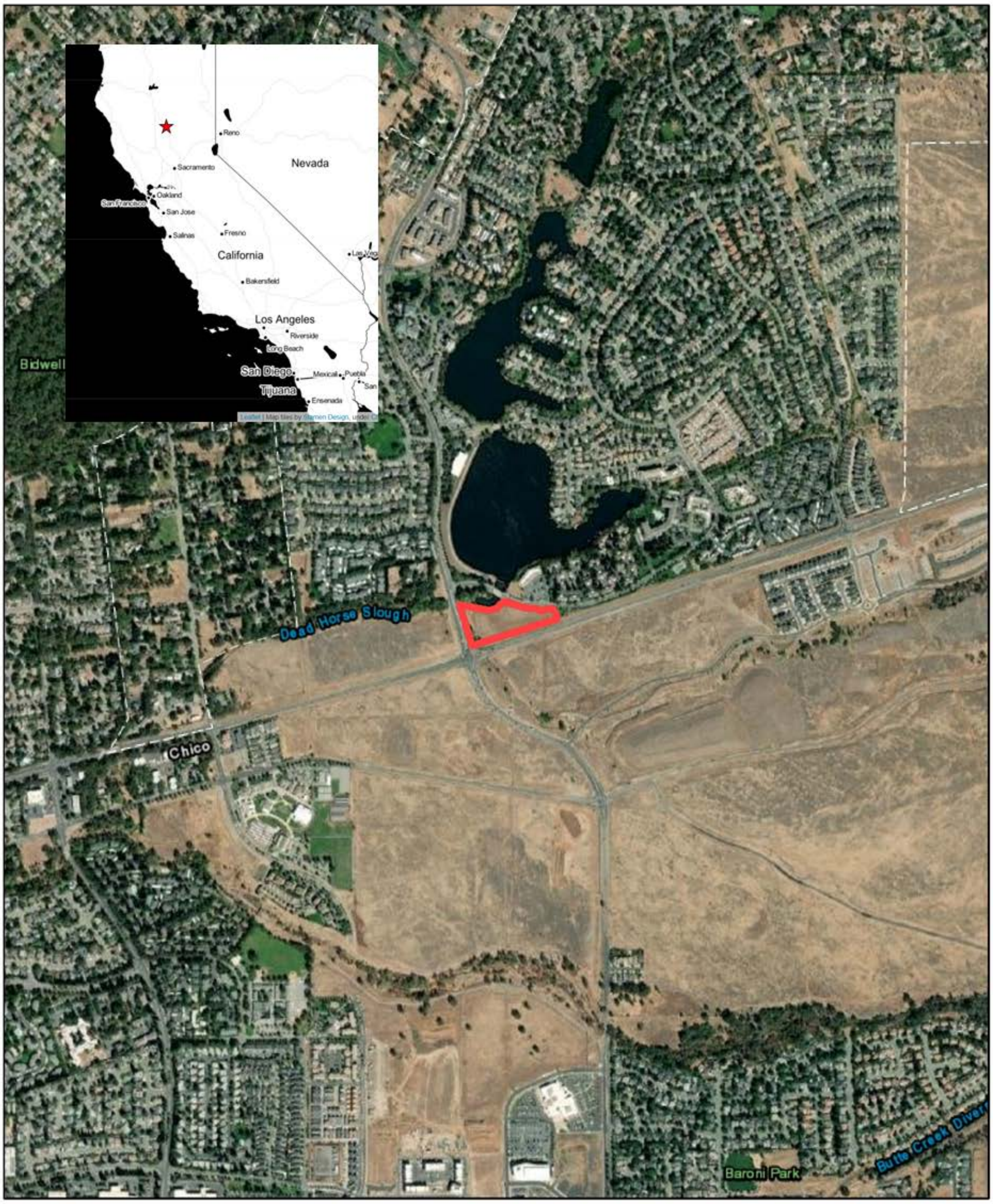
1 INTRODUCTION

This report documents the results of an Energy Impact Assessment completed for the TownePlace Suites Project (Project), which includes the construction of a 4-story, 112-room hotel on a 4.09 acre-site in Chico, California. This report was prepared to analyze the potential direct and indirect environmental impacts associated with Project energy consumption, including the depletion of nonrenewable resources (oil, natural gas, coal, etc.) during the construction and operational phases. The impact analysis focuses on the four sources of energy that are relevant to the Proposed Project: electricity, natural gas, the equipment-fuel necessary for Project construction, and the automotive fuel necessary for Project operations.

1.1 Project Description and Location

The Project proposes to construct a 4-story, 112-room hotel, with a 16,347 square foot footprint, on a 4.09 acre-site. The site is located in east-central Chico, specifically on Sierra Sunrise Terrace and at the northeast quadrant of the State Route 32 (SR 32) and Bruce Road intersection (Figure 1. Project Location). The site is surrounded by Bruce Road to the west with vacant land beyond, Sierra Sunrise Terrace to the north and east with multi-family residential and Lake California beyond, and SR 32 to the south with vacant land beyond. The Site is currently vacant and has low brush and grasses covering the site. Once constructed, access would be accomplished via Bruce Road to Sierra Sunrise Terrace. The hotel will be centered on the site with parking areas screened with evergreen shrubs to buffer views from roadways. The hotel will include 118 parking spots and a 3,385 square foot pool. Over 60 trees is proposed to be included in the Project landscaping along with multiple other plants that are consistent with the area.

The Project Site is designated by the City of Chico General Plan as Commercial Mixed-Use (CMU), which encourages the integration of retail and service commercial uses with office and/or residential uses. This designation may also allow hospitals and other public/quasi-public uses. The Site is currently zoned Community Commercial (CC) in the City Municipal Code. CC zoning permits a wide variety of retail, commercial, office, restaurant, and mixed residential uses, by right.



ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 1. Project Locations

2021-133.05 TownePlace Suites

Attachment L

2 Energy Consumption

2.1 Environmental Setting

2.1.1 *Energy Types and Sources*

California relies on a regional power system comprised of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Natural gas provides California with a majority of its electricity followed by renewables, large hydroelectric and nuclear. PG&E provides electricity and natural gas to the City of Chico. It generates or buys electricity from hydroelectric, nuclear, renewable, natural gas, and coal facilities. PG&E provides natural gas and electricity to most of the northern two-thirds of California, from Bakersfield and Barstow to near the Oregon, Nevada and Arizona State Line. It provides 5.2 million people with electricity and natural gas across 70,000 square miles. In 2017, PG&E announced that 80 percent of the company's delivered electricity comes from greenhouse gas emission-free sources, including renewables, nuclear, and hydropower.

The California Public Utilities Commission (CPUC) regulates PG&E. The CPUC has developed energy efficiency programs such as smart meters, low-income programs, distribution generation programs, self-generation incentive programs, and a California solar initiative. Additionally, the California Energy Commission (CEC) maintains a power plant data base that describes all of the operating power plants in the state by county. Butte County, which encompasses the City of Chico and the Project Site, contains 26 power plants generating electricity, of which 15 are hydro-powered, eight are solar-powered, two are natural gas-fired, and one is biomass-fired (CEC 2019).

2.1.2 *Existing Transmission and Distribution Facilities*

The components of transmission and distribution systems include the generating facility, switching yards and stations, primary substation, distribution substations, distribution transformers, various sized transmission lines, and the customers. The United States contains over a quarter million miles of transmission lines, most of them capable of handling voltages between 115 kilovolts (kv) and 345 kv, and a handful of systems of up to 500 kv and 765 kv capacity. Transmission lines are rated according to the amount of power they can carry, the product of the current (rate of flow), and the voltage (electrical pressure). Generally, transmission is more efficient at higher voltages. Generating facilities, hydro-electric dams, and power plants usually produce electrical energy at fairly low voltages, which is increased by transformers in substations. From there, the energy proceeds through switching facilities to the transmission lines. At various points in the system, the energy is "stepped down" to lower voltages for distribution to customers. Power lines are either high voltage (115, 230, 500, and 765 kv) transmission lines or low voltage (12, 24, and 60 kv) distribution lines. Overhead transmission lines consist of the wires carrying the electrical energy (conductors), insulators, support towers, and grounded wires to protect the lines from lightening (called shield wires). Towers must meet the structural requirements of the system in several ways. They must be able to support both the electrical wires, the conductors, and the shield wires under varying weather conditions, including wind and ice loading, as well as a possible unbalanced pull caused by one or two wires breaking on one side of a tower. Every mile or so, a "dead-end" tower must be able to take the strain resulting if all the wires on one side of a tower break. Every change in direction

requires a special tower design. In addition, the number of towers required per mile varies depending on the electrical standards, weather conditions, and the terrain. All towers must have appropriate foundations and be available at a fairly regular spacing along a continuous route accessible for both construction and maintenance. A right-of-way is a fundamental requirement for all transmission lines. A right-of-way must be kept clear of vegetation that could obstruct the lines or towers by falling limbs or interfering with the sag or wind sway of the overhead lines. If necessary, land acquisition and maintenance requirements can be substantial. The dimensions of a right-of-way depends on the voltage and number of circuits carried and the tower design. Typically, transmission line rights-of-way range from 100 to 300 feet in width. The electric power supply grid within Butte County is part of a larger supply network operated and maintained by PG&E that encompasses the entire northern California region. This system ties into yet a larger grid known as the California Power Pool that connects with the San Diego Gas and Electric and Southern California Edison Companies. These companies coordinate the development and operation, as well as purchase, sale, and exchange of power throughout the State of California. Within Butte County, PG&E owns most of the transmission and distribution facilities.

The California Independent System Operator (CAISO) manages the flow of electricity across the high-voltage, long-distance power lines (high-voltage transmissions system) that make up 80 percent of California's and a small part of Nevada's grid. This nonprofit public benefit corporation keeps power moving to and throughout California by operating a competitive wholesale electricity market, designed to promote a broad range of resources at lower prices, and managing the reliability of the electrical transmission grid. In managing the grid, CAISO centrally dispatches generation and coordinates the movement of wholesale electricity in California. As the only independent grid operator in the western U.S., CAISO grants equal access to 26,000 circuit miles of transmission lines and coordinates competing and diverse energy resources into the grid where it is distributed to consumers. Every five minutes, CAISO forecasts electrical demand and dispatches the lowest cost generator to meet demand while ensuring enough transmission capacity for delivery of power.

CAISO conducts an annual transmission planning process that uses engineering tools to identify any grid expansions necessary to maintain reliability, lower costs or meet future infrastructure needs based on public policies. CAISO engineers design, run and analyze complex formulas and models that simulate grid use under wide-ranging scenarios, such as high demand days coupled with wildfires. This process includes evaluating power plant proposals submitted for study into the interconnection queue to determine viability and impact to the grid. The long-term comprehensive transmission plan, completed every 15 months, maps future growth in electricity demand and the need to meet state energy and environmental goals that require the CAISO grid to connect to renewable-rich, but remote areas of the Western landscape. CAISO promotes energy efficiency through resource sharing. CAISO electricity distribution management strategy designed so that an area with surplus electricity can benefit by sharing megawatts with another region via the open market. This allows the dispatch of electricity as efficiently as possible. By maximizing megawatts as the demand for electricity increases, CAISO helps keep electricity flowing during peak periods.

2.1.3 *Energy Consumption*

Electricity use is measured in kilowatt-hours (kWh), and natural gas use is measured in therms. Vehicle fuel use is typically measured in gallons (e.g. of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh.

The electricity consumption associated with all nonresidential uses in Butte County from 2015 to 2019 is shown in Table 2-1. As indicated, the demand has decreased since 2015.

Table 2-1. Nonresidential Electricity Consumption in Butte County 2015-2019

Year	Electricity Consumption (kilowatt hours)
2019	726,917,845
2018	758,045,561
2017	769,589,586
2016	760,868,006
2015	779,710,133

CEC 2020

The natural gas consumption associated with all nonresidential uses in Butte County from 2015 to 2019 is shown in Table 2-2. As indicated, the demand has remained relatively constant since 2015.

Table 2-2. Nonresidential Natural Gas Consumption in Butte County 2015-2019

Year	Natural Gas Consumption (therms)
2019	16,527,181
2018	16,990,629
2017	17,648,878
2016	17,039,655
2015	16,528,871

CEC 2020

Automotive fuel consumption in Butte County from 2016 to 2020 is shown in Table 2-3. Fuel consumption has decreased between 2016 and 2020.

Table 2-3. Automotive Fuel Consumption in Butte County 2016-2020	
Year	**Total Fuel Consumption (gallons)**
2020	98,166,770
2019	112,460,800
2018	116,603,600
2017	117,448,300
2016	115,075,800

California Air Resources Board (CARB) 2021

2.2 Regulatory Framework

2.2.1 *State*

Senate Bill 1389 Integrated Energy Policy Report

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the California Energy Commissions (CEC) to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (Public Resources Code § 25301a). The CEC prepares these assessments and associated policy recommendations every two years, with updates on alternate years, as part of the Integrated Energy Policy Report (IEPR).

The 2017 IEPR focuses on next steps for transforming transportation energy use in California. The 2017 IEPR addresses the role of transportation in meeting state climate, air quality, and energy goals; the transportation fuel supply; the Alternative and Renewable Fuel and Vehicle Technology Program; current and potential funding mechanisms to advance transportation policy; transportation energy demand forecasts; the status of statewide plug-in electric vehicle infrastructure; challenges and opportunities for electric vehicle infrastructure.

Executive Order B-55-18

In September 2018 Governor Jerry Brown Signed Executive Order (EO) B-55-18, which establishing a new statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Carbon neutrality refers to achieving a net zero carbon dioxide emissions. This can be achieved by reducing or eliminating carbon emissions, balancing carbon emissions with carbon removal, or a combination of the two. This goal is in addition to existing statewide targets for greenhouse gas emission reduction. EO B-55-18 requires the California Air Resource Board (CARB) to "work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Senate Bill 1368

On September 29, 2006, Governor Arnold Schwarzenegger signed into law Senate Bill (SB) 1368 (Perata, Chapter 598, Statutes of 2006). The law limits long-term investments in baseload generation by the state's utilities to those power plants that meet an emissions performance standard jointly established by the CEC and the CPUC.

The CEC has designed regulations that:

- Establish a standard for baseload generation owned by, or under long-term contract to, publicly owned utilities, of 1,100 pounds carbon dioxide per megawatt hour (mWh). This would encourage the development of power plants that meet California's growing energy needs while minimizing their emissions of greenhouse gas.
- Require posting of notices of public deliberations by publicly owned utilities on long-term investments on the CEC website. This would facilitate public awareness of utility efforts to meet customer needs for energy over the long term while meeting the State's standards for environmental impact.
- Establish a public process for determining the compliance of proposed investments with the emissions performance standard (EPS) (Perata, Chapter 598, Statutes of 2006).

Renewable Energy Sources (Renewable Portfolio Standards)

Established in 2002 under SB 1078 and accelerated by SB 107 (2006) and SB 2 (2011), California's Renewables Portfolio Standard (RPS) obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent of their electricity from renewable energy sources by 2020. Eligible renewable resources are defined in the 2013 RPS to include biodiesel; biomass; hydroelectric and small hydro (30 megawatts or less); Los Angeles Aqueduct hydro power plants; digester gas; fuel cells; geothermal; landfill gas; municipal solid waste; ocean thermal, ocean wave, and tidal current technologies; renewable derived biogas; multi-fuel facilities using renewable fuels; solar photovoltaic; solar thermal electric; wind; and other renewables that may be defined later. Governor Jerry Brown signed SB 350 on October 7, 2015, which expands the RPS by establishing a goal of 60 percent of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses upon which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the California Independent System Operator (CAISO) into a regional organization to promote the development of regional electricity transmission markets in the western states and to improve the access of consumers served by the CAISO to those markets, pursuant to a specified process. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

3 Energy Consumption Impact Assessment

3.1 Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to energy if it would do any of the following:

1) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The impact analysis focuses on the four sources of energy that are relevant to the Proposed Project: electricity, natural gas, the equipment fuel necessary for Project construction, and the automotive fuel necessary for Project operations. Addressing energy impacts requires an agency to make a determination as to what constitutes a significant impact. There are no established thresholds of significance, statewide or locally, for what constitutes a wasteful, inefficient, and unnecessary consumption of energy for a proposed land use. For the purpose of this analysis, the amount of electricity and natural gas estimated to be consumed by the Project is quantified and compared to that consumed by all non-residential land uses in Butte County. Similarly, the amount of fuel necessary for Project construction and operations is calculated and compared to that consumed in Butte County.

3.1.1 *Methodology*

Levels of construction and operational related energy consumption estimated to be consumed by the Project include the number of kWh of electricity, therms of natural gas and gallons of gasoline. Modeling was based on Project specific information. The amount of total construction-related fuel used was estimated using ratios provided in the Climate Registry's General Reporting Protocol for the Voluntary Reporting Program, Version 2.1. Electricity and natural gas consumption estimates were calculated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0 (see Air Quality and Greenhouse Gas Emissions Assessment: TownePlace Suites Project [ECORP 2021]). CalEEMod is a statewide land use computer model designed to quantify resources associated with both construction and operations from a variety of land use projects. Operational automotive fuel consumption has been calculated with EMFAC 2021. EMFAC 2021 is a mathematical model that was developed to calculate emission rates and rates of gasoline consumption from motor vehicles that operate on highways, freeways, and local roads in California.

3.1.2 *Project Energy Consumption Impact Analysis*

Project Energy Consumption

The impact analysis focuses on the four sources of energy that are relevant to the Proposed Project: electricity, natural gas, the equipment-fuel necessary for Project construction, and the automotive fuel necessary for Project operations. For the purpose of this analysis, the amount of electricity and natural gas estimated to be consumed by the Project is quantified and compared to that consumed by all non-

residential land uses in Butte County. Similarly, the amount of fuel necessary for Project construction and operations is calculated and compared to that consumed in Butte County.

Energy consumption associated with the Proposed Project is summarized in Table 2-4.

Table 3-1. Proposed Project Energy and Fuel Consumption

Energy Type	Annual Energy Consumption	Percentage Increase Countywide
Building Energy Consumption		
Electricity Consumption[1]	1,236,620 kilowatt-hours	0.170 percent
Natural Gas[1]	40,617 therms	0.245 percent
Automotive Fuel Consumption		
Project Construction 2022[2]	43,153 gallons	0.043 percent
Project Construction 2023[2]	2,365 gallons	0.002 percent
Project Operations[3]	58,952 gallons	0.060 percent

Source: [1]ECORP Consulting 2021; [2]Climate Registry 2016; [3]EMFAC2021 (CARB 2021)
Notes: The Project increases in electricity and natural gas consumption are compared with all uses in Butte County in 2019, the latest data available. The Project increases in automotive fuel consumption are compared with the countywide fuel consumption in 2020, the most recent full year of data.

Operations of the Proposed Project would consume electricity from lighting, space and water heating, and landscape maintenance activities. As shown in Table 2-4, the annual electricity consumption due to operations would be 1,236,620 kilowatt-hours resulting in an approximate 0.17 percent increase in the typical annual electricity consumption attributable to all non-residential uses in Butte County. However, this is potentially a conservative estimate. In September 2018 Governor Jerry Brown Signed EO B-55-18, which established a new statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Carbon neutrality refers to achieving a net zero carbon dioxide (CO_2) emissions. This can be achieved by reducing or eliminating carbon emissions, balancing carbon emissions with carbon removal, or a combination of the two. This goal is in addition to existing statewide targets for greenhouse gas emission reduction. Governor's Executive Order B-55-18 requires CARB to "work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal."

Additionally, Project increases in nonresidential natural gas usage across the County would be negligible; 40,617 therms, which equates to a 0.245 percent increase in consumption. For these reasons, the Project would not result in the inefficient, wasteful, or unnecessary consumption of building energy.

Fuel necessary for Project construction would be required for the operation and maintenance of construction equipment and the transportation of materials to the Project site. The fuel expenditure necessary to construct the physical building and infrastructure would be temporary, lasting only as long as Project construction. The Project's fuel consumption during the construction period is estimated to be 43,153 gallons of fuel during the first year of construction and 2,365 gallons of fuel during the second year of construction. This would increase the annual countywide gasoline fuel use in the county by 0.043

percent and 0.002 percent, respectively. As such, Project construction would have a nominal effect on local and regional energy supplies. No unusual Project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the state. Construction contractors would purchase their own gasoline and diesel fuel from local suppliers and would judiciously use fuel supplies to minimize costs due to waste and subsequently maximize profits. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and requiring recycling of construction debris, would further reduce the amount of transportation fuel demand during Project construction. For these reasons, it is expected that construction fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.

The Project is estimated to generate approximately 500 daily trips (Headway 2020). As indicated in Table 2-4, this would equate to a consumption of approximately 58,952 gallons of automotive fuel per year, which would increase the annual countywide automotive fuel consumption by 0.06 percent. The amount of operational fuel use was estimated using CARB's EMFAC2021 computer program, which provides projections for typical daily fuel usage in Butte County. This analysis conservatively assumes that all of the automobile trips projected to arrive at the Project during operations would be new to Butte County. Fuel consumption associated with vehicle trips generated by the Project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

3.1.3 *State and Local Plans for Renewable Energy/Energy Efficiency*

The proposed hotel would be required to be built to the Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the California Code of Regulations (Title 24). Title 24 was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years; the 2016 standards became effective January 1, 2017. The 2019 Title 24 updates went into effect on January 1, 2020. The 2019 Energy Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 update to the Energy Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The 2019 Energy Standards are a major step toward meeting Zero Net Energy. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments. Additionally, in January 2010, the State of California adopted the California Green Building Standards Code (CalGreen) that establishes mandatory green building standards for all buildings in California, including the building proposed by the Project. The code was subsequently updated in 2013. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality.

Additionally, the Project would also be consistent with the City's General Plan Sustainability Element, which is the primary local plan for renewable energy and energy efficiency influencing Chico. The General Plan Sustainability Element addresses energy conservation through the promulgation of several energy consumption-reducing policy provisions. For instance, Policy SUS-5.2 seeks to support the inclusion of

energy efficient design and renewable energy technologies in public and private projects and Action SUS-5.2.1 is intended to encourage the integration of energy efficiency measures and renewable energy devices. Action SUS-5.2.2 requires the City to provide builders and homeowners with resources and information about energy efficiency and renewable energy technologies and Action SUS-5.2.3 requires incorporation of passive solar design principles (e.g., building materials, high-albedo roofs, eaves, window placement, landscaping, and building orientation) into the Design Guidelines Manual. The Project would in no way conflict or hinder the implementation of these energy-reducing policy provisions.

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LIST OF ATTACHMENTS

Attachment A - Energy Consumption Modeling Output

ATTACHMENT A

Energy Consumption Modeling Output

Proposed Project
Total Construction-Related and Operational
Gasoline Usage

Table 1. Construction Year One			
Action	**Carbon Dioxide Equivalents (CO_2e) in Metric Tons[1]**	**Conversion of Metric Tons to Kilograms[2]**	**Construction Equipment Emission Factor[2]**
Project Construction	438	438,000	10.15
Total Gallons Consumed During Construction Year One:			**43,153**

Table 2. Construction Year Two			
Action	**Carbon Dioxide Equivalents (CO_2e) in Metric Tons[1]**	**Conversion of Metric Tons to Kilograms[2]**	**Construction Equipment Emission Factor[2]**
Project Construction	24	24,000	10.15
Total Gallons Consumed During Construction Year Two:			**2,365**

Notes:
Fuel used by all construction equipment, including vehicle hauling trucks, assumed to be diesel.
[1]Per CalEEMod Output Files found in Air Quality and Greenhouse Gas Emissions Assessment
[2]Per Climate Registry Equation 13e

Sources:
[1]ECORP Consulting. 2021. Air Quality and Greenhouse Gas Emissions Assessment: TownePlace Suites.
[2]Climate Registry. 2016. *General Reporting Protocol for the Voluntary Reporting Program version 2.1.* January 2016.
http://www.theclimateregistry.org/wp-content/uploads/2014/11/General-Reporting-Protocol-Version-2.1.pdf

Table 12. Average Miles per Gallon in Butte County in 2020 [3]								
Area	**Sub-Area**	**Cal. Year**	**Season**	**Veh_tech**	**EMFAC 2021 Category**	**Total Onroad Vehicle Gallons Consumed in Butte County in 2020**	**Total Onroad Vehicle Miles Traveled in Butte County in 2020**	**Total Passenger Vehicle Miles per Gallon in Butte County in 2020**
Sub-Areas	Butte County	2022	Annual	All Vehicles	All Vehicles	98,166,770	1,732,223,214	17.6

Sources:

[3]California Air Resource Board. 2021. EMFAC2021 Mobile Emissions Model.

Table 13. Total Gallons During Project Operations				
Project Onroad Vehicle Daily Trips[4]	**Estimated Miles per Trip[4]**	**Project Onroad Vehicle Daily Miles Traveled**	**Project Onroad Vehicle Daily Fuel Consumption**	**Project Onroad Vehicle Annual Fuel Consumption**
500	5.7	2,850.00	161.51	**58,952**

Sources:

[4]Headway Transportation. 2020. VMT Analysis for TownePlace Suites - Chico, CA.