

## 4.6 Energy

### 4.6.1 Introduction

This section presents the environmental setting and potential impacts of the Proposed Project, reasonably foreseeable distribution components, and alternatives related to energy. This may include fuel and electricity consumption during construction and operation, as well as consistency with State or local plans for renewable energy or energy efficiency. For setting and impact discussions related to GHG emissions, refer to Section 4.8 of this DEIR.

### 4.6.2 Regulatory Setting

#### **Federal Laws, Regulations, and Policies**

##### ***Energy Policy Act***

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. This act included establishing energy-related tax incentives for energy efficiency and conservation; renewable energy; oil and gas production; and electricity generation and transmission. The act also established increased amounts of renewable fuel (e.g., ethanol or biodiesel) to be used in gasoline sold in the U.S., provisions to increase oil and natural gas production on federally owned lands, and federal reliability standards regulating the electrical grid.

##### ***Corporate Average Fuel Economy and Greenhouse Gas Emissions Standards***

The federal government is responsible for establishing regulations to improve the efficiency of motor vehicles. The NHTSA Corporate Average Fuel Economy (CAFE) standards regulate how far vehicles must travel on a gallon of fuel. NHTSA sets CAFE standards for passenger cars and for light trucks (collectively, light-duty vehicles), and separately sets fuel consumption standards for medium- and heavy-duty trucks and engines (NHTSA 2020). Jointly with CAFE, NHTSA also regulates GHG emissions from vehicles of various weight classes.

The CAFE and GHG emissions standards have been rolled out in multiple phases. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses. In August 2016, USEPA and the NHTSA jointly finalized Phase 2 Heavy-Duty National Program standards to reduce GHG emissions and improve fuel efficiency of medium- and heavy-duty vehicles for model year 2018 and beyond (USEPA 2020a). In April 2020, NHTSA and USEPA amended the CAFE and GHG emissions standards for passenger cars and light trucks and established new less stringent standards, covering model years 2021 through 2026 (USEPA 2020b).

#### **State Laws, Regulations, and Policies**

##### ***California Integrated Energy Policy***

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report (IEPR) for the governor and legislature every 2 years. The report

analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2019a). Volume II of the 2018 IEPR Update describes opportunities to improve energy efficiency; integrate more renewable energy into the grid; improve energy forecasting capabilities; enhance resiliency to climate change, and ensure that reliability and the benefits of clean energy reach all Californians (CEC 2019b).

### ***Renewables Portfolio Standard***

California's Renewables Portfolio Standard (RPS), updated in 2018 under Senate Bill 100, sets a goal of obtaining 100 percent zero-carbon electricity for the State by 2045. Interim targets are established to achieve 33 percent electricity produced from renewable sources by 2020 and 50 percent by 2026.

### ***Climate Change Scoping Plan***

The Climate Change Scoping Plan details the State's strategy for achieving its GHG reduction targets and is discussed in greater detail in Section 4.8, "Greenhouse Gas Emissions." The energy sector is one of the key sectors targeted in the Plan, which has the following goals and actions related to energy that may apply to the Proposed Project, reasonably foreseeable distribution components, and alternatives (CARB 2017):

- Achieve sector-wide, publicly-owned utility, and load-serving entity specific GHG reduction planning targets set by the State through Integrated Resource Planning.
- Reduce fossil fuel use.
- Reduce energy demand.
- Reduce dependence on fossil natural gas.

## **4.6.3 Environmental Setting**

### **Energy Resources and Consumption**

California has extensive energy resources, including an abundant supply of crude oil and high production of conventional hydroelectric power. California also leads the nation in electricity generation from renewable sources (e.g., solar, geothermal, and biomass resources) (U.S. Energy Information Administration [EIA] 2019). California has the second highest total energy consumption in the United States but one of the lowest energy consumption rates per capita (48<sup>th</sup> in 2016) due to its mild climate and energy efficiency programs (EIA 2019). A comparison of California's energy-consuming end-use sectors indicates that the transportation sector is the greatest energy consumer, by approximately two to three times compared to the other end-use sectors (e.g., industrial, commercial, and residential) (EIA 2019). Energy produced in San Luis Obispo County comes from a range of sources including solar, geothermal, hydroelectric, nuclear, landfill gas, and oil and gas fields.

## Electric Service Providers

The Proposed Project, reasonably foreseeable distribution components, and alternatives areas are served by PG&E. Table 4.6-1 provides a breakdown of PG&E's energy sources as well as the breakdown for California as a whole.

**Table 4.6-1. PG&E's 2018 Energy Mix**

| Energy Sources                 | Power Mix (Percentage) |            |
|--------------------------------|------------------------|------------|
|                                | PG&E                   | California |
| Eligible Renewable             | 39                     | 31         |
| Coal                           | 0                      | 3          |
| Large Hydroelectric            | 13                     | 11         |
| Natural Gas                    | 15                     | 35         |
| Nuclear                        | 34                     | 9          |
| Unspecified Power <sup>1</sup> | 0                      | 11         |
| <b>Total</b>                   | <b>100</b>             | <b>100</b> |

**Notes:**

1. "Unspecified Power" is defined as electricity from transactions that are not traceable to specific generation sources.

Sources: CEC 2019c

As shown in Table 4.6-1, PG&E obtains electricity from a variety of sources, including a significant percentage (over 30 percent) from renewables, which is slightly higher than the State as a whole. PG&E is on target to meet the interim RPS goals.

### 4.6.4 Impact Analysis

#### Methodology

The impact analysis used basic assumptions regarding construction-related fossil fuel use and operational energy requirements. Construction-related fossil fuel use was estimated based on the anticipated construction equipment use, vehicle trips, and helicopter use. The CARB In-Use Off-Road Diesel Emission Factors model was used to estimate the total amount of diesel fuel use, assuming the following:

- construction equipment less than 100 horsepower consumed 0.408 pounds of fuel per horsepower-hour, and
- construction equipment greater than 100 horsepower consumed 0.367 pounds of fuel per horsepower-hour.

EMFAC was used to estimate the gasoline and diesel fuel used by on-road vehicles. Jet fuel use by helicopters was estimated using fuel consumption estimates using the AEDT methodology. Unless electrified equipment tapped into the power grid is used, electricity use during construction of the Proposed Project, reasonably foreseeable distribution components, and alternatives was assumed to be minimal.

During operation of the Proposed Project, reasonably foreseeable distribution components, and alternatives, there will be infrequent fossil fuel use associated with maintenance and inspection trips since the facilities will be operated remotely. Some of the equipment associated with the Proposed Project, reasonably foreseeable distribution components, and alternatives will use electricity to operate. Other operational energy uses, such as the transmission line distribution losses and energy used to power the equipment, control and HVAC systems as part of the project, are typically assessed at the larger corporate entity level resulting from the difference between generated and delivered energy. There was not sufficient detail available at this time to estimate the distribution loss and other energy use at the individual infrastructure level (e.g., at the substation-level, transmission-structure-level) for the Proposed Project, reasonably foreseeable distribution components, and alternatives. For these reasons, these are not estimated at this time and would be consistent with typical losses for utilities.

### **Criteria for Determining Significance**

For the purposes of this analysis, the Proposed Project, reasonably foreseeable distribution components, and alternatives would result in a significant impact to energy if they would:

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

### **Environmental Impacts**

#### ***Proposed Project***

**Impact ENR-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation – *Less than Significant***

#### **Construction**

Direct energy use would include the consumption of petroleum (e.g., diesel, gasoline, and jet fuel) for operation of construction vehicles and equipment, as well as consumption of electricity for alternatively-powered equipment. Table 4.6-2 shows the estimated fuel consumption associated with Proposed Project construction based on the proposed construction schedule and equipment use.

**Table 4.6-2. Proposed Project Estimated Construction Fuel Consumption**

| <b>Activity Fuel Consumption</b>         | <b>Gasoline<br/>(gallons)</b> | <b>Diesel<br/>(gallons)</b> | <b>Jet A Fuel<br/>(gallons)</b> |
|--|-------------------------------|-----------------------------|---------------------------------|
| Construction Activity On-Road Vehicles   | 6,530                         | 15,449                      | -                               |
| Construction Activity Off-Road Equipment | -                             | 183,523                     | -                               |
| Helicopters                              | -                             | -                           | 180,671                         |
| <b>Total for Construction</b>            | <b>6,530</b>                  | <b>198,972</b>              | <b>180,671</b>                  |

As shown in Table 4.6-2, construction of the Proposed Project would require about equal amounts of diesel and jet fuel (for operation of helicopters), at just under 200,000 gallons each (see Appendix C of this DEIR for supporting calculations). Gasoline use would be primarily related to worker commutes to and from the construction site and is estimated at 6,530 gallons.

Proposed Project construction would use equipment similar to other transmission line and substation projects; therefore, there is no reason to assume that the Proposed Project's construction-related energy use would be excessive or wasteful. For this reason, construction-related impacts on energy use would be considered less than significant. APMs AIR-1 through AIR-3 and Mitigation Measure AQ-1 would further reduce impacts by requiring proper maintenance of equipment and vehicles, utilization of newer equipment and vehicles where feasible, and shutting off engines when not in use (see Section 4.3, "Air Quality"). These measures would further ensure that the Proposed Project would not result in wasteful use of fossil fuels during construction. As a result, this impact would be **less than significant**.

### **Operation**

Proposed Project operation would not require substantial fossil fuel use outside of occasional maintenance and inspection activities. As described in Chapter 2, *Project Description*, the Estrella Substation would be inspected monthly and the power line would be inspected annually, with maintenance and repairs being conducted on an as-needed basis. All Proposed Project components would be operated remotely. As such, fossil fuel use would be limited to vehicles and helicopters used in inspecting Proposed Project facilities and any equipment that may be used to conduct infrequent repairs and maintenance.

In general, there is no reason to suggest that any transmission line losses or electricity use for operation of the Proposed Project facilities would be any different than similarly designed transmission lines and substations. The Proposed Project is designed to ensure efficient and reliable electricity transmission for the Paso Robles area to meet current and future planned electricity needs. Therefore, operation of the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy. This impact would be **less than significant**.

### **Impact ENR-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency – *Less than Significant***

The Proposed Project would not conflict with or obstruct any state or local renewable energy or energy efficiency plans. As described in Chapter 2, *Project Description*, the Proposed Project would improve the reliability and accessibility of electricity for the Paso Robles area, which is

consistent with CEC goals in the IEPR. Specifically, the Proposed Project would reduce susceptibility of the Paso Robles area to power losses due to a transmission line failure or other N-1 event. With buildout of the reasonably foreseeable distribution components (see below), the Proposed Project also would improve reliability for customers due to long feeders and would allow PG&E to meet projected future increased electricity demands.

While the Proposed Project would not reduce fossil fuel reliance or specifically increase or encourage renewable energy generation, it would not impede future use of renewable energy sources. As such, the Proposed Project would not impede progress toward RPS goals or implementation of energy efficiency programs. Therefore, this impact would be **less than significant**.

### ***Reasonably Foreseeable Distribution Components and Ultimate Substation Buildout***

Construction of the reasonably foreseeable distribution components would involve similar processes and equipment as the Proposed Project, albeit on a much smaller scale. Construction of the 21 kV distribution facilities within the Estrella Substation would involve deliveries of equipment and materials, but it would not involve ground-disturbance since the substation will already have been built. Installation of the new distribution line segments would require some vegetation clearing and grading to establish work areas and excavation for distribution pole installations, although this would be on a substantially smaller scale than the Proposed Project's 70 kV power line. As such, construction of the reasonably foreseeable distribution components would require far less energy use than the Proposed Project, both in terms of direct (e.g., fuel) and indirect energy use. For this reason, construction-related impacts on energy use would be considered less than significant. APMs AIR-1 through AIR-3 and Mitigation Measure AQ-1 would further reduce impacts for the reasonably foreseeable distribution components, serving to prevent wasteful or unnecessary energy use during construction. Ultimate buildout of the substation (e.g., installation of additional transformers, breakers, switches, etc.) would require some ground disturbance for constructing the equipment foundations and substation wiring, which would use limited amounts of energy from operation of construction equipment. Construction activities and energy use associated with any additional distribution feeders and/or 70 kV lines that could be supported through ultimate substation buildout are speculative at this time as the routes of these lines are not known.

Once constructed, the distribution and ultimate substation buildout components would be operated remotely and fossil fuel use would be limited to vehicles and equipment involved in periodic inspections, maintenance, and repairs. Therefore, impacts under significance criterion A would be **less than significant**.

Build out of the reasonably foreseeable distribution components and any additional infrastructure facilitated through ultimate substation buildout would both improve reliability for customers and allow PG&E to efficiently serve future anticipated load growth in the Paso Robles area. In this regard, the distribution components would improve the reliability and accessibility of electricity for the Paso Robles area, which is consistent with CEC goals in the IEPR. While the reasonably foreseeable distribution components would not specifically increase or encourage renewable energy generation, it would not impede use of renewable energy sources or

otherwise hinder progress toward RPS goals or implementation of energy efficiency programs. Therefore, impacts under significance criterion B would be **less than significant**.

### ***Alternatives***

#### **No Project Alternative**

Under the No Project Alternative, no impacts related to energy would occur. No new substation or new/reconducted power line would be constructed; therefore, there would be no construction-related energy use or potential for increased energy use during maintenance and operations. Likewise, there would be no potential to conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As a result, **no impact** would occur under either significance criteria A or B.

#### **Alternative SS-1: Bonel Ranch Substation Site**

Alternative SS-1 would have slightly higher potential for energy consumption in the form of fuel use compared to the proposed Estrella Substation. The substation located at the Bonel Ranch site would involve a slightly longer 230 kV interconnection and therefore would require approximately one additional month of construction. Additionally, due to the Bonel Ranch Substation Site's location adjacent to the Estrella River, it is possible that unsuitable soils could be encountered during construction that could require greater excavation, off-haul, and/or import of soils than the Proposed Project (although geotechnical studies have not been completed for the Alternative SS-1 site). This would only slightly increase the use of fossil fuels during construction but is still a reasonable and efficient use of fossil fuels. Apart from these factors, the substation at the Alternative SS-1 site would be largely similar to the Estrella Substation and would involve similar construction processes and indirect energy use (e.g., embodied energy in materials). For these reasons, construction-related impacts on energy use would be considered less than significant. APMs AIR-1 through AIR-3 and Mitigation Measure AQ-1 would serve to further prevent wasteful or unnecessary energy use during construction.

Once constructed, the substation at the Alternative SS-1 site would be operated remotely and fossil fuel use would be limited to vehicles and equipment involved in periodic inspections, maintenance, and repairs. This energy use during the operation phase would be largely similar to the Proposed Project's operational energy use and would not be significant. Therefore, impacts under significance criterion A would be **less than significant**.

Alternative SS-1, when paired with Alternative PLR-1C, would provide the same functions as the Proposed Project in terms of improving the reliability and accessibility of electricity for customers in the Paso Robles area, which is consistent with CEC goals in the IEPR. While Alternative SS-1 would not specifically reduce fossil fuel reliance and/or increase or encourage renewable energy generation, it would not impede use of renewable energy sources or otherwise hinder progress toward RPS goals or implementation of energy efficiency programs. Therefore, impacts under significance criterion B would be **less than significant**.

#### **Alternative PLR-1A: Estrella Route to Estrella Substation**

Due to its longer length (approximately 6.5 miles longer) and duration of construction (16 months longer), Alternative PLR-1A would involve greater construction-related energy use (e.g., fuel consumption) compared to the Proposed Project. However, while construction of the

Alternative PLR-1A power line alignment would require greater energy use than the Proposed Project, this would still represent a reasonable use of fossil fuels considering that the new power line would be meeting a critical transmission system need. Therefore, construction-related impacts on energy use would be considered less than significant. Additionally, APMs AIR-1 through AIR-3 and Mitigation Measure AQ-1 would serve to further prevent wasteful or unnecessary energy use during construction.

Operation and maintenance of Alternative PLR-1A would involve a similar number and frequency of vehicle trips compared to the Proposed Project's 70 kV power line. The power line under Alternative PLR-1A would be operated remotely and fossil fuel use would be limited to vehicles and equipment involved in periodic inspections, maintenance, and repairs, which would not be significant. Therefore, impacts under significance criterion A would be **less than significant**.

Alternative PLR-1A, when paired with the Estrella Substation, would provide the same functions as the Proposed Project in terms of improving the reliability and accessibility of electricity for customers in the Paso Robles area, which is consistent with CEC goals in the IEPR. While Alternative PLR-1A would not specifically reduce fossil fuel reliance and/or increase or encourage renewable energy generation, it would not impede use of renewable energy sources or otherwise hinder progress toward RPS goals or implementation of energy efficiency programs. Therefore, impacts under significance criterion B would be **less than significant**.

#### **Alternative PLR-1C: Estrella Route to Bonel Ranch, Option 1**

Alternative PLR-1C would be similar in length to Alternative PLR-1A and would require a similarly extended construction schedule compared to the Proposed Project. As such, it would involve a similar level of increased construction-related energy use (e.g., fuel consumption). However, while construction of the Alternative PLR-1C power line alignment would require greater energy use than the Proposed Project, this would still represent a reasonable use of fossil fuels considering that the new power line would be meeting a critical transmission system need. Therefore, construction-related impacts on energy use would be considered less than significant. APMs AIR-1 through AIR-3 and Mitigation Measure AQ-1 would further prevent wasteful or unnecessary energy use during construction.

Operation and maintenance of Alternative PLR-1C would involve a similar number and frequency of vehicle trips compared to the Proposed Project's 70 kV power line. The power line under Alternative PLR-1C would be operated remotely and fossil fuel use would be limited to vehicles and equipment involved in periodic inspections, maintenance, and repairs, which would not be significant. Therefore, impacts under significance criterion A would be **less than significant**.

Alternative PLR-1C, when paired with the substation under Alternative SS-1, would provide the same functions as the Proposed Project in terms of improving the reliability and accessibility of electricity for customers in the Paso Robles area, which is consistent with CEC goals in the IEPR. While Alternative PLR-1C would not specifically reduce fossil fuel reliance and/or increase or encourage renewable energy generation, it would not impede use of renewable energy sources or otherwise hinder progress toward RPS goals or implementation of energy efficiency programs. Therefore, impacts under significance criterion B would be **less than significant**.

### **Alternative PLR-3: Strategic Undergrounding (Option 1 & 2)**

Alternative PLR-3 would involve a longer construction duration compared to the same segment of the Proposed Project's 70kV powerline and would involve additional excavation (e.g., trenching) compared to the Proposed Project. The type of construction equipment used for trenching the power line underground is different from equipment used to construct overhead lines, but generally the underground power line construction would be expected to use increased amounts of fuel and energy. However, even if the construction fossil fuel use increased, it is unlikely that this would result in wasteful or inefficient energy use. Therefore, construction-related impacts on energy use would be considered less than significant. Like the Proposed Project, APMs AIR-1 through AIR-3 and Mitigation Measure AQ-1 would further prevent wasteful or unnecessary energy use during construction.

Operation and maintenance of Alternative PLR-3 would involve a similar number and frequency of vehicle trips compared to the Proposed Project's 70 kV power line. The power line under Alternative PLR-3 would be operated remotely and fossil fuel use would be limited to vehicles and equipment involved in periodic inspections, maintenance, and repairs, which would not be significant. Therefore, impacts under significance criterion A would be **less than significant**.

Alternative PLR-3 would provide the same functions as the Proposed Project in terms of improving the reliability and accessibility of electricity for customers in the Paso Robles area, which is consistent with CEC goals in the IEPR. While Alternative PLR-3 would not specifically reduce fossil fuel reliance and/or increase or encourage renewable energy generation, it would not impede use of renewable energy sources or otherwise hinder progress toward RPS goals or implementation of energy efficiency programs. Therefore, impacts under significance criterion B would be **less than significant**.

### **Alternative SE-1A: Templeton Substation Expansion – 230/70 kV Substation**

Similar to Alternative SS-1, construction of Alternative SE-1A would involve slightly greater energy use (e.g., fuel) compared to the proposed Estrella Substation due to the slightly longer 230 kV interconnection and extended construction schedule (one month). Although geotechnical studies have not been completed for the Templeton Substation Expansion Site, it is possible that soft/unsuitable soils could be encountered during construction, requiring greater excavation, off-haul, and/or import of soils (and associated energy use) than the Proposed Project. This would only slightly increase the use of fossil fuels during construction and is still a reasonable and efficient use of fossil fuels. Therefore, construction-related impacts on energy use would be considered less than significant. Like the Proposed Project, APMs AIR-1 through AIR-3 and Mitigation Measure AQ-1 would further prevent wasteful or unnecessary energy use during construction.

Once constructed, the substation at the Alternative SE-1A site would be operated remotely and fossil fuel use would be limited to vehicles and equipment involved in periodic inspections, maintenance, and repairs. This energy use during the operation phase would be largely similar to the Proposed Project's operational energy use and would not be significant. Therefore, impacts under significance criterion A would be **less than significant**.

Alternative SE-1A, when paired with Alternative SE-PLR-2, would provide the same functions as the Proposed Project in terms of improving the reliability and accessibility of electricity for

customers in the Paso Robles area, which is consistent with CEC goals in the IEPR. While Alternative SE-1A would not specifically reduce fossil fuel reliance and/or increase or encourage renewable energy generation, it would not impede use of renewable energy sources or otherwise hinder progress toward RPS goals or implementation of energy efficiency programs. Therefore, impacts under significance criterion B would be **less than significant**.

### **Alternative SE-PLR-2: Templeton-Paso South River Road Route**

Alternative SE-PLR-2 would be approximately 4.8 miles shorter than the Proposed Project's 70 kV power line and would require a reduced construction schedule (9 months shorter). As such, it would involve reduced construction-related energy use (e.g., fuel consumption) due to the reduced number of poles to install and reduced construction activity. Regardless, like the Proposed Project, construction of Alternative SE-PLR-2 would represent a reasonable use of fossil fuels. Therefore, construction-related impacts on energy use would be considered less than significant. APMs AIR-1 through AIR-3 and Mitigation Measure AQ-1 would further prevent wasteful or unnecessary energy use during construction.

Operation and maintenance of Alternative SE-PLR-2 would involve a similar number and frequency of vehicle trips compared to the Proposed Project's 70 kV power line. The power line under Alternative SE-PLR-2 would be operated remotely and fossil fuel use would be limited to vehicles and equipment involved in periodic inspections, maintenance, and repairs, which would not be significant. Therefore, impacts under significance criterion A would be **less than significant**.

Alternative SE-PLR-2, when paired with the substation under Alternative SE-1A, would provide the same functions as the Proposed Project in terms of improving the reliability and accessibility of electricity for customers in the Paso Robles area, which is consistent with CEC goals in the IEPR. While Alternative SE-PLR-2 would not specifically reduce fossil fuel reliance and/or increase or encourage renewable energy generation, it would not impede use of renewable energy sources or otherwise hinder progress toward RPS goals or implementation of energy efficiency programs. Therefore, impacts under significance criterion B would be **less than significant**.

### **Alternative BS-2: Battery Storage to Address the Distribution Objective**

Although the sizes of FTM BESSs under Alternative BS-2 are not yet known and would depend on future load growth in the Paso Robles area, the energy use associated with BESS construction would be similar or likely reduced compared to the Estrella Substation. With the exception of a possible flow battery at example FTM Site 6 (i.e., Templeton Substation), individual BESSs would likely be substantially smaller than the substation and would involve less earthwork and heavy equipment operation. Once constructed, BESSs under Alternative BS-2 would be operated remotely and fossil fuel use would be limited to vehicles and equipment involved in periodic inspections, maintenance, and repairs.

In many ways, Alternative BS-2 would serve to implement State plans for renewable energy and energy efficiency. The use of battery-stored power during high demand periods would reduce the need for higher carbon intensity sources of electricity generation throughout the electricity grid such as the use of peaker plants, which are fossil-fueled based. This would result in an overall energy efficiency savings as excess energy produced would be stored and released back

to the grid or the end users as needed to avoid the need for less energy efficient sources during peak periods.

Overall, FTM BESS sites were selected for illustrative purposes only, BESS installations have not been designed and technologies have been selected, and the specifics of Alternative BS-2 are unknown. Thus, project-level determinations cannot be made as impacts are speculative. Therefore, consistent with CEQA Guidelines Section 15145, no significance conclusion is provided for any of the significance criteria.

### **Alternative BS-3: Third Party, Behind-the-Meter Solar and Battery Storage**

Construction activities under Alternative BS-3 would include deliveries of individual BESS units to customers' properties, installation of the units on-site, and wiring work to connect the BESS to existing electrical systems. BESS units for larger commercial properties could be heavy and may require larger/specialized trucks for delivery, and may require use of a small crane for installation. These activities would be considerably smaller in scale compared to the Proposed Project and would therefore result in lower energy consumption. Depending on the size of solar power installations, it is unknown how the construction energy use would compare to the Proposed Project. It is unlikely given the anticipated size of solar panel and battery installations that energy use would be substantial when compared to the Proposed Project. Once installed, BESS and solar facilities would require minimal operation and maintenance. The energy use during construction and operation of individual BTM facilities under Alternative BS-3 would not be expected to be wasteful, inefficient, or unnecessary.

Like Alternative BS-2, Alternative BS-3 would largely function to implement the State's plans with respect to renewable energy and energy efficiency. Deployment of the BTM BESSs would result in an overall energy efficiency savings as excess energy produced would be stored and released back to the grid or the end users as needed to avoid the need for less energy efficient sources during peak periods. Likewise, BTM solar units would generate renewable energy that may be stored on-site or discharged to the grid, potentially decreasing the amount of new (fossil-fuel-based) generating facilities needed in the future to supply the local areas' energy needs. As such, Alternative BS-3 would comport with the IEPR, RPS, and Climate Change Scoping Plan.

Overall, due to the fact that specific locations and characteristics of BTM resources procured under Alternative BS-3 are unknown at this time, project-level impact determinations are not possible as the impacts are speculative. Therefore, consistent with CEQA Guidelines Section 15145, no significance conclusion is reached under any of the significance criteria.

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