CHAPTER 4 PROJECT ALTERNATIVES

Section 15126.6 of the California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) describe a reasonable range of alternatives to the Proposed Project or to the Proposed Project location that would feasibly attain most of the Proposed Project objectives, but would avoid or lessen any significant environmental impacts. An EIR should evaluate the environmental impacts of the alternatives compared to the Proposed Project. This chapter of the EIR describes and evaluates project alternatives and is intended to implement the requirements set forth in the CEQA Guidelines (14 CCR 15000 et seq.). This chapter also identifies the Environmentally Superior Project Alternative as required by CEQA Guidelines Section 15126.6(e)(2).

4.1 Rationale for Alternatives Selection

The following discussion covers a reasonable range of feasible alternatives that focuses on avoiding or substantially lessening any significant effects of the Proposed Project, even if these alternatives would not attain all of the Proposed Project objectives or would be more costly. The discussion focuses on alternatives to the Proposed Project that are capable of feasibly meeting most of the Proposed Project objectives identified in Chapter 1, Project Description, of this EIR, which have been included below for ease of reference. According to the CEQA Guidelines, many factors may be taken into account when addressing the feasibility of alternatives, such as environmental impacts, site suitability as it pertains to various land use designations, economic viability, availability of infrastructure, regulatory limitations, and jurisdictional boundaries (CEQA Guidelines, 15126.6(f)(1)).

As described in Chapter 1, the Proposed Project objectives are as follows:

1. Develop a solar energy project with a rated capacity of up to 90 megawatts (MW) of alternating current (AC) and an energy storage facility that can supply electricity to indirectly reduce the need to emit greenhouse gases caused by the generation of similar quantities of electricity from either existing or future nonrenewable sources to meet existing and future electricity demands, including during on-peak power periods.
2. Develop a renewable solar energy project that can meet the criteria to achieve the maximum federal solar Investment Tax Credit, which is intended to decrease the cost of renewable energy generation and delivery, promote the diversity of energy supply, and decrease dependence of the United States on foreign energy supplies.
3. Assist in achieving the state's Renewables Portfolio Standard (RPS), as mandated under the 100 Percent Clean Energy Act of 2018 (Senate Bill 100), by developing and

constructing California RPS-qualified solar generation from eligible renewable energy resources by December 31, 2045.

4. Develop a utility-scale solar energy project that improves electrical reliability for the San Diego region by providing a source of local generation as near as possible to existing San Diego Gas and Electric (SDG&E) transmission infrastructure.
5. Provide a new source of energy storage that assists the state in achieving or exceeding its energy storage targets, consistent with the terms of Assembly Bill 2514, and its greenhouse gas reduction targets, consistent with Assembly Bill 32 and Senate Bill 32.
6. Site a solar energy project in an area within San Diego County that has excellent solar attributes, including but not limited to high direct normal irradiance, in order to maximize productivity.
7. Develop a utility-scale solar energy facility within San Diego County that supports the economy by investing in the region and creates construction jobs.

In order to identify alternatives to the Proposed Project, the Applicant and County reviewed a broader range of alternatives. Based on initial review and consideration, it was determined that some of these preliminary alternatives did not accomplish most of the Proposed Project objectives, as listed above, or would result in greater impacts than the Proposed Project. Thus, these alternatives were rejected and were not fully analyzed in this EIR. The alternatives that were considered and rejected are discussed in Section 4.2.

Two alternatives would meet most of the Project objectives, are potentially feasible, and would avoid or lessen impacts as compared to the Proposed Project. These include a Community Buffer Alternative and the Reduced Project Alternative, as shown in Figures 4-1 and 4-2. Additionally, a No Project Alternative is required to be included in the range of alternatives. Under the No Project Alternative, two scenarios are analyzed: 1) No Development; and 2) Buildout as contemplated in the County's planning documents.

The three alternatives, as listed below, are fully analyzed in this EIR. For each of these alternatives, the analysis includes a description of the alternative and a comparison of the environmental effects relative to the Proposed Project. These Project alternatives are addressed in Sections 4.3 to 4.5 in this chapter as follows:

- Alternative 1: No Project Alternative (No Development and Buildout Scenarios)
- Alternative 2: Community Buffer Alternative
- Alternative 3: Reduced Project Alternative

Thus, the reasonable range of alternatives for this Project is determined to consist of the Proposed Project, No Project Alternative, Community Buffer Alternative, and Reduced Project Alternative. CEQA does not require a particular number of alternatives, only that a reasonable range be considered. The alternatives studied constitute a reasonable range because they contain enough variation to facilitate informed decision making and public participation that leads to a reasoned choice. (CEQA Guidelines, 15126.6(a)-(f)). Also, according to CEQA Guidelines Section 15126.6(d), discussion of each alternative should be sufficient "to allow meaningful evaluation, analysis, and comparison with the Proposed Project." Therefore, the significant effects of each alternative are discussed in less detail than those of the Proposed Project, but in enough detail to provide decision makers with perspective and a reasoned choice among alternatives to the Proposed Project.

An EIR need not consider an alternative whose effects cannot be reasonably identified, whose implementation is remote or speculative, or one that would not achieve most of the basic Proposed Project objectives. Finally, the Environmentally Superior Alternative shall be identified and if it is the No Project Alternative, the next most Environmentally Superior Alternative shall be identified (refer to Section 4.8).

The Proposed Project would result in potentially significant and unavoidable adverse impacts for which feasible mitigation measures would not reduce the impacts to below a level of significance for aesthetics (Section 2.1) and mineral resources (Section 2.8). Implementation of feasible mitigation measures would reduce potentially significant impacts to the following issue areas to less than significant: air quality (Section 2.2), biological resources (Section 2.3), cultural resources (Section 2.4), geology, soils, and seismicity (Section 2.5), hazards and hazardous materials (Section 2.6), hydrology and water quality (Section 2.7), noise (Section 2.9), paleontological resources (Section 2.10), tribal cultural resources (Section 2.11) and wildfire (Section 2.12).

Potential impacts to the following issue areas were determined not to be significant after further evaluation: agricultural resources; energy; greenhouse gas (GHG) emissions; land use and planning; parks and recreation; public services; transportation; and utilities and service systems. One issue, population and housing, was determined to not be significant or have no impact during the Initial Study process.

Sections 4.3 through 4.5 compare the impacts of the No Project Alternative, the Community Buffer Alternative, and the Reduced Project Alternative to the impacts of the Proposed Project. A qualitative summary of these alternatives that compares their potential impacts is provided in Table 4-1, Summary of Alternatives to the Proposed Project.

4.2 Alternatives Considered but Rejected

As noted previously, the purpose of an alternatives analysis is to develop alternatives to the Proposed Project that substantially lessen at least one of the significant environmental effects identified as a result of the Proposed Project, while still feasibly meeting most of the Project objectives. Project alternatives that would avoid or reduce the severity of impacts identified under the Proposed Project are addressed later in this chapter.

In addition to the Project alternatives fully analyzed in this EIR as discussed above, the Project Applicant and County went through an extensive site planning process to identify and avoid constraints, which included analysis of numerous site plans for the Proposed Project. This site planning process was intended to create a project that optimizes energy generation, while being sensitive to environmental constraints, and ultimately resulted in the Proposed Project. Several site plans were considered but were subsequently rejected from further analysis in the EIR because they did not accomplish most of the Proposed Project objectives or would result in greater impacts than the Proposed Project. As discussed in more detail below, the alternatives considered and rejected include:

- Energy Efficiency Ordinance
- Distributed Generation and Storage Policy (Rooftop Solar Panels)
- Wind Energy
- Alternative Locations
- ECO Substation Connection Alternative (No Switchyard)
- Community Buffer with Southwest Expansion

4.2.1 Energy Efficiency Ordinance Alternative

Description

Under this Energy Efficiency Ordinance Alternative, the Proposed Project would not be built and the equivalent energy (90 MW of AC) would be supplied through energy conservation activities. These conservation efforts would be completed via Energy Conservation programs designed to reduce the overall use of energy.

Currently there are already a number of energy conservation programs under the direction of the California Public Utilities Commission (CPUC) for customers to be serviced by the Project, including programs developed by SDG&E, the County of San Diego, other counties where the Project electricity would be utilized, Southern California Edison and other local utilities. Local utilities provide programs, such as inline energy profiling and in-home energy audits, to make

customers more aware of their energy usage and of ways to conserve, as well as a variety of free brochures on improving energy efficiency. These programs include financial incentives for installing specific energy-efficient appliances. The County of San Diego (County) already has a Green Building Incentive Program (County of San Diego 2012) to encourage homeowners and builders to utilize energy conservation, natural resource conservation, and water conservation to assist in overall reductions of energy use. The County also has a 2015-2020 Strategic Energy Plan (County of San Diego 2015) that outlines approaches and goals to reduce its own energy usage, including energy efficient new construction and measures to improve energy efficiency.

Feasibility

As the County does not have jurisdiction over local or regional energy utilities or utility providers, this Energy Efficiency Ordinance Alternative would consist of the County of San Diego and other counties implementing additional energy efficiency measures beyond those currently in place. These programs could include incentives for the use of energy efficient appliances, and further energy efficiency incentives for new construction. To implement such an alternative, a funding source would need to be identified to implement the Energy Efficiency Ordinance Alternative. Due to the nature of the programs and lack of methods to recuperate costs, however, it is assumed that the source of funding would have to be via grants. At this time no grants have been identified as available to feasibly implement this alternative. In addition, this alternative could not be implemented by the County in a reasonable period of time because it would take years to reduce the demand necessary to offset 90 MW of energy.

Ability to Meet Project Objectives

The Energy Efficiency Ordinance Alternative would result in a significant reduction in impacts as compared with the Proposed Project as this alternative would not require additional physical development on land in order to offset energy demands. However, while energy efficiency would reduce energy demand and overall GHG emissions, it would not meet the Proposed Project objectives, including providing additional energy (Objective 1), utilizing the Investment Tax Credit to provide additional renewable energy (Objective 2), achieving the state RPS by providing renewable energy source (Objective 3), providing a solar project to increase electrical reliability for San Diego region (Objective 4), providing energy storage to help the state meet or exceed AB 2514 goals and greenhouse reduction targets (Objective 5), providing a solar project in an area with excellent solar attributes (Objective 6), or providing a project that invests in infrastructure that provides construction jobs within San Diego County (Objective 7). This alternative is also outside the control of the project Applicant and could not be implemented by the project Applicant.

Conclusion

Since this alternative would not feasibly meet the Proposed Project objectives and would not be feasible to be implemented by the County (or other counties where energy from the Project would be utilized) in a reasonable period of time, it was eliminated from further consideration in this EIR.

4.2.2 Distributed Generation and Storage Policy (Rooftop Solar Panels) Alternative

Description

The Distributed Generation and Storage Policy Alternative would consist of distributed generation and energy storage, including residential and commercial roof-top solar panels throughout San Diego County and other counties where energy from the Project would be utilized in place of the Proposed Project. Based on the National Renewable Energy Laboratory (NREL; NREL 2018) data for average systems installed in California in 2017, the average size of a residential rooftop PV system is 6.2 kW DC. Therefore, to deliver the equivalent capacity of 90 MW of the Proposed Project and its energy storage, this alternative would include 14,500 domestic systems with equivalent home battery systems to secure the equivalent capacity and energy storage proposed by the Proposed Project.

Feasibility

The Distribution Generation Policy Alternative would result in a significant reduction in impacts as compared with the Proposed Project as this alternative could focus facilities within developed and urbanized areas in order to generate additional energy. Thus, the Distributed Generation and Storage Policy (Rooftop Solar Panels) Alternative (Distribution Generation and Storage Policy Alternative) was considered. While this alternative would result in a significant net reduction in project impacts as compared with the Proposed Project, it is outside the control of, and could not be implemented by the Project Applicant, the County or other counties where the Project electricity would be utilized within a reasonable period of time.

Given recent averages for domestic rooftop solar installations, the number of new installations required to deliver up to an additional 90 MW of solar electricity by 2021 render this alternative highly speculative and therefore infeasible from a technical and commercial perspective. Per the CPUC annual reporting (CPUC 2019), 8,001 MW of solar capacity was built between 2007 and 2018 through 926,986 solar projects throughout the state. Within the SDG&E service area, this included 1,037 MW of energy generated through 143,559 projects during this 11-year period. Per the County's 2018 Climate Action Plan Annual Report (County of San Diego 2019), the County permitted approximately 194.87 MW of residential PV during the 4-year period between 2014 and 2018. It would take a substantial amount of time for an additional 90 MW of power to be generated by individual residential and commercial PV projects on top of the already occurring

distributed solar photovoltaics. As battery storage is not always paired with residential and commercial PV nor paired at the same amount of energy generated by the PV, it is expected that proving the equivalent energy storage would take even more time than the PV component. It is also the case that the federal solar tax credit has started to phase out with declining tax benefits every year through 2022. The federal solar tax credit will be unavailable for residential projects after year-end 2021, and unavailable for commercial projects after year-end 2022. Further, SDG&E has met its net metering threshold. Given these two factors, the historical pace of rooftop solar installation may not continue, making it less likely that homeowners will invest in rooftop solar installations, not more likely. It is also unclear how the Applicant could feasibly obtain control to provide distributed solar PV and battery storage equivalent to this 90 MW generation level. This is one of the many factors that may be taken into account when addressing the feasibility of alternatives (CEQA Guidelines §15126.6(f)(1)).

In addition to this alternative being outside of the Applicants' control, it is also outside the control of the County to approve the acquisition of energy from distributed generation sources by investor-owned utilities, such as SDG&E. Instead, the authority to direct investor-owned utilities (IOUs) to procure additional utility-side distributed generation and to determine how customer-side distribution generation is compensated rests with the CPUC. While SDG&E indicates they are monitoring the use of small-scale distributed generation projects to meet its renewable goals, the ultimate methods that SDG&E uses to meet its RPS goals depends on the mandated RPS procurement programs and CPUC, as well as the required integrated resource planning that considers cost-effectiveness "to ensure that customers receive the least-cost best-fit resources" (SDG&E 2020). These RPS procurement programs include the Green Tariff Shared Renewables (GTSR), Bioenergy Market Adjusting Tariff (BioMAT), Renewable Auction Mechanism (RAM) Program and Bioenergy Renewable Auction Mechanism (BioRAM). It is noted that SDG&E satisfied the BioRAM requirement, and that program is now closed. It is speculative whether the CPUC would allow the IOUs to procure any additional utility-side distributed generation in San Diego County beyond what it has already mandated.

Larger scale rooftop solar (greater than 1 MW) was also considered under the Distributed Generation and Storage Policy Alternative. While it is possible for such larger scale distributed generation resources to be used to meet the state's RPS goals, it is speculative whether the CPUC would approve acquisition of additional distributed generation in San Diego County or other counties that would use the Project's electricity in light of the current situation. It is speculative whether up to 90 MW of distributed generation could reach commercial operation in a timely manner considering the time necessary to achieve CPUC approval, seek bids for applicable projects, and bring the projects to fruition. In fact, SDG&E has indicated they are limiting the use of the RAM program to an as-needed basis because a more streamlined procurement process is needed to effectively complete projects under that program (SDG&E 2020). As an example of

the difficulty in implementing distributed generation projects, SDG&E has pursued implementing up to 26 MW of utility-owned solar PV generation under its CPUC-approved Solar Energy Project since 2010. In 2011, SDG&E contracted for eight distributed solar projects totaling 17 MW under the Solar Energy Project. However, permitting, site and contractor issues arose, and costs of the projects were exceeding the allowed rate of $3.50/W(dc). In 2015 SDG&E held another call for contract to find distributed generation projects that would fit in the allowed rate, and no contracts were executed. As such, it is not reasonable to assume 90 MW of distributed generation could be generated in a reasonable amount of time or with feasible cost from programs such as this.

The County and other counties that utilize the Project's electricity can implement policies to remove administrative hurdles to taking advantage of programs already established by the CPUC; however, the policies cannot be guaranteed to result in quantified distributed solar energy generation due to the nature of the programs and lack of jurisdiction to require participation in the programs. For example, the County has already adopted a Property Assessed Clean Energy (PACE) Program that enables property owners to finance energy reduction improvements (County of San Diego 2020). The PACE Program is voluntary and allows for the financing of energy efficient projects, water efficiency projects and renewable energy upgrades that can be repaid through annual property tax bills. However, the County does not have the authority to require property owners to participate, and the amount of energy ultimately generated by such a program is not reliable. Overall, this Distributed Generation Policy Alternative is not feasible for the Applicant to implement.

Given recent averages for rooftop solar installations, the sheer number of new installations required to deliver up to an additional 90 MW of solar electricity by 2021 render this alternative infeasible from a practical timing perspective. In addition, this alternative could not guarantee that 90 MW of renewables would be generated considering the County-controlled energy conservation programs and other counties' energy conservation programs are voluntary and the County, other counties that utilize the Project's electricity, and the Applicant do not have control to ensure rooftop solar is installed. Accordingly, this alternative would not be feasible, as it could not be implemented by the Project Applicant in a reasonable period of time.

Ability to Meet Project Objectives

The Distributed Generation and Storage Policy Alternative would not meet the majority of the Project objectives. This alternative could, at least for a short time, potentially utilize the Investment Tax Credit to provide additional renewable energy (Objective 2), and reduce greenhouse gas emissions consistent with AB 32 and Senate Bill (SB) 32 and provide energy storage per Assembly Bill 2514 (AB) (Objective 5). However, this alternative would not meet the remainder of the Project objectives. As indicated above, there is no way to ensure that this

alterative would be able to provide up to 90 MW of renewable energy and accompanying battery storage to meet energy demand during on-peak periods to meet Objective 1.

Objective 3 would not be met by this alternative since rooftop solar is ineligible to contribute toward the RPS and there is no mechanism to allow developers to purchase or trade small-scale distributed generation energy. In order to use the renewable energy credits (RECs) from distributed generation solar energy systems, those systems must report generation to the Western Renewable Energy Generation Information System (WREGIS), and must use a meter that has an independently-verified accuracy rating of 2 percent or higher, before any RECs associated with the distributed generation can count toward a utility's RPS (California Energy Commission 2013). Furthermore, Senate Bill SBx1-2 and Decision 11-12-052 set limits on the use of unbundled RECs for RPS compliance. SDG&E can only use unbundled RECs to meet 10% of its RPS obligation after 2017 (CPUC 2017). Finally, in significant part due to the transaction costs associated with having net-metered distributed PV participate in the REC market, including reporting and metering costs and the costs of engaging in a multitude of small transactions, no viable market for such unbundled RECs has yet to be developed (Crossborder Energy 2013). Therefore, the likelihood of distributed generation contributing to SDG&E's RPS obligations in the same manner as the Proposed Project is slim. As a consequence, the lack of a market for tradable RECs means that no agreed mechanism currently exists to allow developers to purchase or trade small-scale distributed generation that could displace the development of utility-scale solar facilities, which contribute to the RPS goals. With respect to larger scale rooftop solar (greater than 1 MW), while it is possible for such larger scale distributed generation resources to be used to meet the state's RPS goals, as noted above, it is speculative whether the CPUC would approve acquisition of additional distributed generation in San Diego County and other counties that utilize the Project's electricity in light of its ongoing programs. Therefore, this alternative would not meet Objective 3.

This alternative would not meet Objective 4 because it would not improve electrical reliability for the San Diego region, nor would it be utility-scale solar project. Thus, this alternative would not meet Objective 4. As there is not a mechanism to ensure that the solar would be located in an area with excellent solar attributes or equivalently required renewables in the best location to maximize production, the Distribution Generation Policy Alternative would not meet Objective 6. Finally, as the Distribution Generation Policy Alternative would not create a utility-scale solar project that would support the economy by creating construction jobs, it would also not meet Objective 7. Thus, the Distribution Generation Policy Alternative would not meet most of the seven Project objectives.

Conclusion

This alternative would not meet most of the Project objectives and could not be feasibly implemented by the Project Applicant and, therefore, it was eliminated from further consideration in this EIR.

4.2.3 Wind Energy Alternative

Description

The Wind Energy Alterative would involve providing a 90 MW wind energy generation facility in San Diego County. Thus, this alternative would install industrial scale wind turbines rather than a solar array. As with the Proposed Project, the Wind Energy Alternative would also include supporting infrastructure improvements such as transmission lines, substation, switchyard, metrological stations, access, and water tanks. In some circumstances, wind projects are a viable alternative to solar projects; however, only approximately 1.5% of the unincorporated areas of San Diego County has wind resources suitable for utility-scale wind energy facility development. The County has developed a Wind Resource Map as a part of the Wind Energy Zoning Ordinance Amendment and General Plan Amendment to the Mountain Empire Subregional Plan (Boulevard Chapter) and Borrego Springs Community Plan to Allow Wind Energy Development, POD 10-007 (County of San Diego 2013). Several of areas suitable for wind energy generation are already being pursued by other applicants and are not available. The Proposed Project site is not a viable wind energy generation location, and the Applicant lacks site control over land with suitable wind power potential in San Diego County. Further, it would take years to negotiate site control and conduct due diligence on such an alternative site.

Feasibility

In order to be considered as an alternative under CEQA, the alternative must reduce a significant impact of the Project. A wind energy project is not anticipated to reduce aesthetic impacts. Tall industrial scale wind turbines would typically be located on topographically elevated areas that are visible from a distance. In addition, wind energy projects would result in an additional night lighting impact due to the Federal Aviation Administration lighting requirements for flight safety as well as shadow flicker that would not occur under a solar project. A wind energy project would also result in impacts to biological resources. Thus, this alternative would likely require biological open space easements that may result in significant and unavoidable impacts to mineral resources. Thus, impacts to mineral resources may not be reduced to less than significant. In addition, wind energy projects also typically result in additional biological impacts related to bird strikes. Wind turbines may also generate operational noise that is above and beyond that of the Proposed Project. Thus, noise impacts may not be reduced.

Ability to Meet Project Objectives

The Wind Energy Alternative could meet Objective 5 related to meeting energy storage and greenhouse gas targets; however, this alternative would not meet most of the Project objectives as described below. This alternative would not provide additional energy through a solar energy project (Objective 1). This alternative would not develop a renewable solar energy project utilizing the Investment Tax Credit to provide additional renewable energy (Objective 2). This alternative would not achieve the state RPS by developing a California RPS-qualified solar generation from eligible renewable energy resources by December 31, 2045 (Objective 3). This alternative would also not provide a solar project to increase electrical reliability for San Diego region (Objective 4). In addition, this alternative would not provide a solar project in an area with excellent solar attributes (Objective 6). Finally, this alternative would not develop a utility-scale solar energy facility within San Diego County that supports the economy by investing in the region and creates construction jobs (Objective 7). Overall, the Wind Energy Alternative would not meet most of the Project objectives.

Conclusion

Since this alternative would not likely lessen or avoid the significant impacts from the Proposed Project and would not meet most of the objectives, it was eliminated from further consideration in this EIR.

4.2.4 Alternative Locations

Description

The Alternative Locations Alternative would consist of placing a 90 MW solar energy generation and storage facility with supporting improvements in another location within the unincorporated County area. To be a viable alternative, it is assumed that the Alternative Locations would consist of areas with excellent solar resources and locations in close proximity to existing transmission lines with capacity to convey the energy generated by the alternative.

Feasibility

Section 15126.6(f)(2) of the CEQA Guidelines addresses alternative locations for a project. The key question and first step in the analysis is whether any of the significant effects of the Proposed Project would be avoided or substantially lessened by developing the Proposed Project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the Project need to be considered for inclusion in the EIR. Further, CEQA Guidelines Section 15126.6(f)(1) lists several factors that may be taken into account when addressing

feasibility of alternatives (any alternative, not just alternative locations) and states that "No one of these factors establishes a fixed limit on the scope of reasonable alternatives."

The Proposed Project site has been selected in accordance with Objective 4, locating solar facilities as near as possible to existing SDG&E transmission infrastructure. In addition, the Proposed Project site was specifically selected due to its excellent solar attributes in accordance with project Objective 6. The Proposed Project site location also provides high direct normal irradiance, both because of its elevation and because the Jacumba area climate zone provides hot summers and mild winters with minimal coastal marine influence, which is also beneficial for solar energy production. Both of the siting criteria also assist in meeting Objective 1 of providing 90 MW of AC energy.

The Applicant and County have explored a number of alternative locations throughout San Diego County and have screened these locations for their capability to meet the Project objectives, including the presence of excellent solar attributes. There are no other known readily available parcels of undeveloped land of similar size in the eastern portion of the County that could accommodate development of the Proposed Project that have not already been considered and rejected for development of a similar solar project, provide adequate site accessibility, and/or could be acquired by the Applicant within a reasonable period of time. Ultimately, the Applicant does not own or have the ability to easily acquire other sites in the San Diego region in order to provide an Alternative Location project.

Ability to Meet Project Objectives

The Alternative Location Alternative has the potential to meet the basic Project objectives, as it would include a 90 MW utility-scale solar facility in another location within San Diego County (Objective 1). It is assumed it could potentially utilize the Investment Tax Credit (Objective 2), count towards state managed RPS goals (Objective 3), and provide energy storage and GHG reductions (Objective 5), as well as would include a utility scale project within San Diego County that would invest in the region and provide construction jobs (Objective 7).

Since there is no potential alternative site identified, however, it is speculative to determine if the Alternative Location would meet location objectives such as being located near existing infrastructure (Objective 4) and being located in an area with excellent solar attributes (Objective 6). Nonetheless, the Alternative Location could potentially meet the majority of the Project objectives if a feasible site is found.

Conclusion

In conclusion, an alternate project location was dismissed from further evaluation because a suitable site was not identified within the County that would avoid or substantially lessen impacts from the Proposed Project, and/or would be potentially feasible.

4.2.5 ECO Substation Connection Alternative (No Switchyard)

Description

SDG&E recently completed the East County (ECO) substation project. A 13.3-mile 138 kV transmission line connecting the ECO Substation with the Boulevard Substation Rebuild was also completed. A Proposed Project alternative was considered that would eliminate the on-site switchyard and would instead include a 4-mile underground line that would extend from the Project site to the ECO substation. As detailed in the ECO Substation Draft EIR project description (CPUC 2010), the 138 kV transmission line typically requires a 100-foot-wide right-of-way (ROW) that may be disturbed during initial construction and routine maintenance. A four-mile, 100-foot-wide ROW totals 48.5 acres. As it is assumed the line would be underground, this impact area does not include the 150-foot brush clearance radius that is typically included for poles. Based on information from the ECO Substation IR (CPUC 2010), the impact area is assumed to include a 15-foot-wide access/maintenance roadway plus a 24-foot-wide temporary impact area for trenching and line installation. Thus, a 4-mile line would result in approximately 7.27-acres of permanent impacts and 11.6 acres of temporary impacts. As additional access roadways may be required along with a staging area, this may potentially underestimate the area that would be impacted by the 4-mile line. This alternative would not include construction of the on-site switchyard, but all other aspects of the ECO Switchyard to Substation Connection Alternative would be the same as the Proposed Project within the Project site.

Feasibility

In regards to feasibility, it is unknown if there is capacity at the ECO substation to accommodate 90 MW or if use of the substation by the Applicant would be approved by SDG&E. The ECO Substation Connection Alternative would reduce the on-site impacts of the 3.2 acre switchyard to air quality; biological resources; cultural resources; geology, soils, and seismicity; hazards and hazardous materials; mineral resources; paleontological resources; and tribal cultural resources. While these impacts on-site would be reduced under this ECO Substation Connection Alternative, this alternative would result in additional 7.27-acres of permanent impacts and 11.6 acres of temporary impacts off-site that would far exceed the switchyard impact area avoided on-site. This off-site impact area primarily includes Sonoran mixed woody succulent scrub, as well as shadescale scrub and Peninsular juniper woodland and scrub that are considered sensitive

habitat. Drainages also cross the corridor, and sensitive plants (sticky geraea, slender-leaved ipomopsis, scarlet gilia, oceanblue larkspur and Palmer's grapplinghook) are located within this area (CPUC 2010). Thus, biological resource impacts would be significantly increased compared to the Proposed Project. The additional trenching would also increase air emissions and GHG emissions due to the larger area impacted, additional earthwork, and longer construction schedule. This area may also contain subsurface cultural, geological, and paleontological resources that would be impacted by grading activities. It is assumed that visual impacts and potential wildfire risk increases would be temporary and would be less than significant since the lines would be undergrounded and a construction fire protection plan (CFPP) would be implemented during construction. Overall, the ECO Substation Connection Alternative would ultimately result in more impacts than the Project.

In conclusion, the ECO Substation Switchyard Connection Alternative is potentially infeasible.

Ability to Meet Project Objectives

As the only change would be to the switchyard, this alternative would continue to meet the majority of Project objectives, as it would include 90 MW of renewable energy generation (Objective 1), use of the Investment Tax Credit (Objective 2), providing RPS-eligible renewables (Objective 3), GHG reductions (Objective 5), location of solar in an excellent solar attribute area (Objective 6), and would support the San Diego County economy (Objective 7). Due to the need to extend a transmission line 4 miles, it would not meet Project Objective 4 that is intended to locate near SDG&E facilities to reduce transmission infrastructure needs. Overall, the ECO Substation Connection Alternative would meet 6 of the 7 Project objectives.

Conclusion

While this alternative would meet most of the basic Project objectives, this alternative was eliminated from further consideration because it could not be feasibly implemented by the Project Applicant and would not reduce impacts.

4.2.6 Community Buffer with Southwest Corner Expansion

Description

This Community Buffer with Southwest Corner Expansion would include a 450-foot buffer from the residential properties north of Old Highway 80. This 16.1-acre buffer area would specifically provide a noise buffer from residential uses during project construction, as well as operations, and would also provide a visual buffer from these properties. To partially offset the loss in solar panels from the 450-foot buffer area, this alternative would expand panels into 13.5 acres in the

southwestern corner of the Project site. Overall, this alternative would reduce the development footprint relative to the Project by approximately 1.9 acres.

Due to the terrain within the southwest corner, the number of feasible PV modules in the hill area is reduced compared to the number of modules that could be installed on level terrain. Therefore, this alternative would reduce the number of PV modules on the site by approximately 25,758 for a total of 274,242 PV modules. This reduction in PV modules would reduce energy generated by approximately 11.4 MW relative to the Proposed Project, which would result in a total of 78.6 MW generated by this alternative compared to the Proposed Project's generation of 90 MW. The battery storage, switchyard, overhead and underground lines and other project components would be the same as the Proposed Project. The length of construction may be slightly reduced under this Alternative, but the daily construction would remain the same as the Proposed Project, as would site access and number of employees.

Feasibility

The Community Buffer with Southwest Expansion would include a 450-foot buffer from residential uses north of Old Highway 80. The loss in PV modules in the buffer area would be partially offset by installing PV modules in the southwestern corner of the site. However, due to the terrain in the southwest corner the number of PV modules that could be installed is more limited as compared to level terrain. This alternative would not have a substantial effect to the geology and paleontological resource impacts. The provision of a 450-foot buffer from the community would reduce aesthetic impacts, but not to a level less than significant. This alternative would also reduce air quality and noise impacts. Due to the avoidance of the 16.1-acre area that is primarily fallow agriculture and the additional impacts to 13.5 acres of an area with higher habitat quality, impacts to biological habitat and some species would be increased. An additional biological resource impact would occur to jurisdictional wetlands and Quino checkerspot butterfly. In addition, this alternative would impact a significant cultural resources and tribal cultural resources site, thereby increasing impacts to cultural and tribal cultural resources. Overall, the Community Buffer with Southwest Expansion would not be feasible, as it would result in greater significant impacts than the Proposed Project.

Ability to Meet Project Objectives

The Community Buffer with Southwest Expansion would generally meet all project objectives, although to a slightly lesser degree that the Proposed Project would. For example, this alternative would result in approximately 25,758 fewer PV modules, resulting in a total of 274,242 PV modules. This alternative would generate 78.6 MW, which is less than the Proposed Project (90 MW). Therefore, this alternative would not achieve 90 MW of renewable energy generation

(Objective 1), providing RPS-eligible renewables (Objective 3), and achieving GHG reductions (Objective 5) to the same extent as the Proposed Project.

Conclusion

Since the Community Buffer with Southwest Expansion would likely result in greater significant impacts than the Proposed Project and would not achieve Project Objectives to the extent of the Proposed Project, it was eliminated from further consideration in this EIR.

4.3 Analysis of the No Project Alternative

4.3.1 No Project Alternative Description and Setting

CEQA requires an evaluation of the No Project Alternative so that decision makers can compare the impacts of approving the Proposed Project with the impacts of not approving the Proposed Project. According to CEQA Guidelines, Section 15126.6(e), the No Project Alternative must discuss the existing conditions at the time the Notice of Preparation for the EIR is published, as well as what would be reasonably expected to occur in the foreseeable future if the Proposed Project was not approved, based on current plans and consistent with available infrastructure and community services. If the project is other than a land use or regulatory plan, the No Project Alternative is the circumstance under which the Proposed Project does not proceed. If the Project did not proceed and no development was proposed, then the Project site would remain in its existing condition and all impacts identified in Chapter 2 of this EIR would be avoided. However, the No Project Alternative must also describe the events or actions that would be reasonably expected to occur in the foreseeable future if the Proposed Project was not approved.

The existing County General Plan land use designation for the majority of the Proposed Project development footprint is Specific Plan; therefore, it is reasonable to assume that if the Project was not approved that the Specific Plan are portion of the Project site would be developed.

For purposes of this No Project Alternative analysis, the previously proposed Ketchum Ranch Specific Plans for the Project site were considered as to what could potentially be developed within the Project site. The Ketchum Ranch Specific Plan was a multi-use concept; a residential community with recreational and visitor oriented commercial uses on approximately 1,250 acres. The conceptual land use plan included 1,110 dwelling units, active/passive open space for recreational uses such as an 18-hole golf course, a wastewater reclamation facility, and other supporting uses. In 2006, another applicant submitted an application for a proposed Specific Plan that identified 2,125 residential units, commercial development, a school site, parks and open spaces, sewage treatment facility, and supporting infrastructure. However, a revised Specific Plan was submitted which substantially reduced the number of residential units to 1,048 dwelling

units, and included a 285-acre golf course, a hotel, and other project components. The proposed Ketchum Ranch Specific Plan was withdrawn in 2011.

Thus, for purposes of the No Project Alternative two scenarios are analyzed below. Under the buildout No Project Alternative it is anticipated that the Project site would be developed as a multi-use concept, including residential units, commercial, recreation, and supporting infrastructure. The number of residential units under the buildout No Project Alternative is anticipated to be up to 1,110 units.

4.3.2 Comparison of the Effects of the No Project Alternative to the Proposed Project

Aesthetics

No Development No Project Alternative

Under the No Development No Project Alternative, the visual conditions of the Project site would be retained in their current state. As such, the No Development No Project Alternative would avoid the Proposed Project's impacts to aesthetics under the no development scenario. This includes avoidance of the significant and unavoidable visual character and quality impacts related to the change in the established rural, open and unencumbered character of the Project site (**Impacts AE-1 and AE-2**). The No Development No Project Alternative scenario would also avoid the panoramic view impacts of the project (**Impacts AE-3** through **AE-9)**, including impacts to scenic views from I-8, Old Highway 80, and local, State and Federal recreational areas. The No Development No Project Alternative scenario would also avoid the cumulative impacts of the Proposed Project (**Impacts AE-CU-1** and **AE-CU-2**), includes cumulative impacts to visual character and scenic vistas. Refer to EIR Section 2.1, Aesthetics, for additional details regarding aesthetic impacts of the Project. While the Proposed Project includes mitigation measures **M-AE-1** through **M-AE-6** to reduce visual character and quality and panoramic view impacts, these impacts would remain significant under the Proposed Project. Overall, the no build No Project Alternative would avoid all significant and unavoidable aesthetic impacts of the Proposed Project.

In summary, if no development were to occur under the No Development No Project Alternative, then all aesthetic impacts identified for the Project (see Section 2.1, Aesthetics) would be avoided. However, it is reasonable to expect the Project site would be developed as discussed in Section 4.3.1. Thus, the following analysis is provided to disclose the potential aesthetic impacts of the Buildout No Project Alternative.

Buildout No Project Alternative

Under the Buildout No Project Alternative, the visual conditions of the Project site would be changed to a developed multi-use community with up to 1,110 residential units, commercial development, recreational and open space uses, and infrastructure improvements. Regarding the size, scale and massing, the Buildout No Project Alternative is assumed to include one to two-story residential buildings that would be similar in height to existing structures in the area but the commercial uses may be at a larger size, scale and massing than currently present. It is assumed that the proposed structures would be primarily neutral colors and colors that would not significantly contrast with development in the vicinity. The residential and commercial structures would also be expected to be more uniform in appearance, differing from the existing non-uniform appearance of development in the community.

The Buildout No Project Alternative would appear substantially denser than the existing Jacumba Hot Springs community and substantially greater in overall scale given the number of residential units expected and total area that could be developed. The existing community is approximately 250 acres, and considering some open space would be included in the Buildout No Project Alternative, the developed community is anticipated to be increased by 1,110 residential units and approximately 1,000 acres, considering some open space would be included in the Buildout No Project Alternative. This substantial increase in community size as well as the increase in density and suburban character would significantly alter the existing undeveloped character of the Project site. Overall, the No Project Alternative would result in a contrast to the existing visual character and quality of the Project site due to the change of the site from an open rural site to a developed multi-use community.

Relative to the Proposed Project, the visual contrast would be less under the Buildout No Project Alternative considering the change to an expanded, more intense community would be more consistent with the existing Jacumba Hot Springs area versus a change to a solar facility. Overall, the Buildout No Project Alternative would reduce the solar and switchyard visual contrast impacts to the Jacumba Hot Springs community character **(Impacts AE-1, Impact AE-CU-1**). However, the Buildout No Project Alterative would continue to result in a significant visual contrast with the existing visual character and quality of the area considering the significant change from an open undeveloped site to a developed multi-use community.

As described above, the Buildout No Project Alternative would change the character of the Project site and viewshed from a rural open character to a more urbanized community. This change in character would significantly alter the existing visual character of the Project site relative to the Project's impact to valued visual community character (**Impact AE-2, Impact AE-CU-2**); however, the solar facility character would be less compatible than an expanded community

character would be. Thus, the Buildout No Project Alternative would result in a lesser impact to valued visual community character than the Proposed Project.

In regard to impacts to focal and panoramic vistas, I-8, Old Highway 80, and Local, State and Federal recreational areas were analyzed as key viewpoint locations. Currently the panoramic views from the key views (see Figures 2.1-8 to 2.1-17) include rural residential with a substantial amount of undeveloped open land. Due to the openness of the area, these views include long-distance panoramic views.

The Buildout No Project Alternative would change approximately 1,000 acres from open land to a developed community. Considering the existing community is approximately 250 acres of existing development, the No Project Alternative would increase the developed community by approximately four times the size of the existing community and the number of residential units would be substantially increased.

Relative to the Proposed Project, the buildout development area would be increased to approximately 1,000 acres instead of the 643 acres impacted by the Project. In addition, the buildout would include a community with varying buildings and a roadway network, instead of uniform rows of dark colored solar panels and battery energy storage system containers. From the key view locations, the buildout would include some taller structures with greater mass than the solar facility. From distant views, the Buildout No Project Alternative would likely result in less contrast to the existing conditions and would have less of an impact on panoramic views than the Proposed Project. These views include I-8 (**Impact AE-3**), State Parks lands (Anza-Borrego Desert State Park Lands and Carrizo Gorge Wilderness) to the west of the Project (**Impact AE-6**), Round Mountain (**Impact AE-7**), Airport Mesa (**Impact AE-8**), or Table Mountain (**Impact AE-9**).

From closer viewpoints, the Buildout No Project Alternative may have similar or greater impacts to long-distance mountain views than the Proposed Project due to the additional height expected from structures versus solar panels. Thus, the No Project Alternative would have similar or potentially greater impacts to Old Highway 80 (**Impact AE-4**) and Jacumba Community Park **(Impact AE-5**).

Air Quality

No Development No Project Alternative

Under the No Development No Project Alternative, no additional air quality emissions would occur and the Project's significant impacts related to toxic air contaminants (TAC) as well as criteria pollutants would be avoided. Specifically, the construction diesel exhaust emissions from the Proposed Project was determined to result in a cancer risk on site above the 1 in 1 million

threshold without application of T-BACT (**Impact AQ-1**). Proposed Project emissions of NO_x, PM_{10}, and $PM_{2.5}$ would exceed the daily emissions threshold of significance (**Impact AQ-CU-1**). While the Proposed Project would implement mitigation measures **M-AQ-1** and **M-AQ-2** to reduce emissions during construction to below a level of significance, the No Development No Project Alternative would entirely avoid these air quality emission impacts of the Project.

Buildout No Project Alternative

The Buildout No Project Alternative would generate construction and operational emissions associated with a multi-use development, which would include up to 1,100 residential units. Construction of approximately 1,000 acres of community uses would entail additional grading, building construction, architectural coatings, infrastructure improvements, and paving than the Proposed Project. In addition, the construction period would be longer than the Proposed Project construction schedule considering the additional grading and construction efforts required. Overall, the daily construction-related emissions would be expected to increase under the Buildout No Project Alternative due to the more extensive construction activities required. Thus, the buildout No Project Alternative would result in greater impacts than the Project related to diesel exhaust emissions (**Impact AQ-1**) as well as No_x, PM_{10} and $PM_{2.5}$ criteria air pollutants (**Impact AQ-CU-1**). In addition, other criteria pollutant emissions would be greater than the Proposed Project.

In addition to construction-related air quality emissions, the Buildout No Project Alterative would result in increased air quality emissions during operations compared to the Proposed Project. A multi-use community would generate emissions from transportation (mobile sources), energy use, water use, and solid waste generation. Due to the size of the community proposed, operational air quality impacts of the buildout No Project Alternative would be potentially significant. Conversely, the Proposed Project would provide a source of "clean" solar energy that would reduce energy-related emissions during operations and would require minimal transportation for operation. As such, the Proposed Project air quality operational impacts would be significantly less than the Buildout No Project Alternative, as the operations would not generate substantial traffic, energy, water, or solid waste (EIR Section 2.2, Air Quality).

Sewer treatment facilities have the potential to generate substantial odor if proper odor control measures are not implemented. As the sewer treatment facility for the buildout scenario could be located in proximity to existing Jacumba Community Hot Springs, future residents in other areas, and future residents of the multi-use community, exposure of odor-sensitive uses to odors could occur under this alternative. Thus, the Buildout No Project Alternative could potentially result in significant odor impacts. The Proposed Project would not generate significant odor impacts. Thus, the Buildout No Project Alternative would have greater odor impacts than the Proposed Project.

Biological Resources

No Development No Project Alternative

The existing site conditions would remain under the No Development No Project Alternative, including existing biological resources. Therefore, no impacts to biological resources would occur under this alternative. When compared to the Proposed Project, the No Development No Project Alternative would avoid all impacts to biological resources. This includes avoidance of the following biological impacts: State-listed Tricolored blackbird (**Impact BI-W-2**), special status plants (**Impacts BI-SP-1 to BI-SP-4**), special status wildlife (**Impacts BI-W-1** and **BI-W-2, BI-W-5, BI-W-6**), nesting birds (**Impacts BI-W-3**), bats (**Impacts BI-W-4**), raptor foraging habitat (**Impact BI-W-2**), wildlife movement (**Impacts BI-WLC-1 to WLC-3**), core wildlife area (**Impact BI-WLC-2**), burrowing owls (**Impact BI-W-2**), riparian habitat and sensitive vegetation communities (**Impacts BI-V-1** to **BI-V-4**), and jurisdictional resources (**Impacts BI-JAR-1** to **BI-JAR-3**). The Project would mitigate these potential impacts to below a level of significance with **M-BI-1** to **M-BI-12** that include biological monitoring; habitat preservation; construction-related indirect or temporary avoidance measures; resource management plan; nesting bird and bat surveys; bat roost avoidance; prevention of invasive plant species; O&M guidelines; and noise reduction measures. While these impacts would ultimately be reduced to below a level of significance by mitigation under the Proposed Project, the No Development No Project Alternative would completely avoid impacts to biological resources since no change to the resources would occur. In summary, if no development were to occur under the No Project Alternative, then all biological resource impacts identified for the Project (see Section 2.3, Biological Resources) would be avoided.

Buildout No Project Alternative

Under the Buildout No Project Alternative, it is anticipated that approximately 1,000 acres of the Project site would be developed. Therefore, the buildout scenario would include a larger footprint than the Proposed Project (anticipated increase of approximately 257 acres). In addition, the Buildout No Project Alternative would introduce more people and more development to the area that would potentially result in greater potential for indirect impacts to biological resources from human and pet intrusion into open space, lighting, water quality, invasive plants, and other impacts. Thus, impacts related to the following biological resources would be expected to be increased relative to the Proposed Project: State-listed Tricolored blackbird (**Impact BI-W-2**), special status plants (**Impacts BI-SP-1 to BI-SP-4**), special status wildlife (**Impacts BI-W-1** and **BI-W-2, BI-W-5, BI-W-6**), nesting birds (**Impacts BI-W-3**), bats (**Impacts BI-W-4**), raptor foraging habitat (**Impact BI-W-2**), wildlife movement (**Impacts BI-WLC-1 to WLC-3**), core wildlife area (**Impact BI-WLC-2**), burrowing owls (**Impact BI-W-2**), riparian habitat and sensitive vegetation communities (**Impacts BI-V-1** to **BI-V-4**), and

jurisdictional resources (**Impacts BI-JAR-1** to **BI-JAR-3**). Similar to the Project, it is expected that mitigation measures (similar to **M-BI-1** to **M-BI-12**) would be feasible to implement to reduce these potential biological resource impacts to below a level of significance.

Cultural Resources

No Development No Project Alternative

Under the No Development No Project Alternative, the cultural resources on the Project site would not be disturbed. Therefore, no impacts to cultural resources would occur under this alternative. When compared to the Proposed Project, the no development No Project Alternative would avoid all impacts to cultural resources. This includes avoidance of **Impact CR-1** related to undiscovered cultural resources within the potential impact area, and **Impact CR-2** related to the potential impacts to undiscovered human remains during construction. The Proposed Project would mitigate these impacts to below a level of significance via **M-CR-1** to **M-CR-4** that require temporary fencing, archaeological monitoring, a Cultural Resources Treatment Agreement and Preservation Plan, and Long-term Preservation of Resources. While these impacts would ultimately be reduced to below a level of significance by proposed mitigation under the Proposed Project, the no development No Project Alternative would completely avoid impacts to cultural resources since no change to the resources would occur.

Buildout No Project Alternative

Under the Buildout No Project Alternative, it is anticipated that approximately 1,000 acres of the Project site would be developed. Compared to the Proposed Project, this would increase ground disturbance by 257 acres. Thus, impacts related to the following cultural resources would be expected to be greater relative to the Proposed Project: **Impact CR-1** related to undiscovered cultural resources within the potential impact area, **Impact CR-2** related to the potential impacts to undiscovered human remains during construction. Similar to the Proposed Project, it is expected that mitigation measures (similar to **M-CR-1** to **M-CR-4**) would be feasible to implement to reduce these potential cultural resource impacts to below a level of significance.

Geology, Soils, and Seismicity

No Development No Project Alternative

The No Development No Project Alternative would not involve any construction or structures. Thus, the No Development No Project Alternative would avoid the Proposed Project's significant geologic impacts related to potential static settlement, liquefaction, possible lateral spread and expansive soils during construction and operation (**Impacts GEO-1 and GEO-2**). While the Proposed Project's geologic impacts would be reduced to below a level of significance

with implementation of mitigation measure **M-GEO-1** that requires a final site-specific geotechnical report that demonstrates compliance with the California Building Code requirements, the No Development No Project Alternative would entirely avoid these impacts considering no improvements would occur in areas subject to potential static settlement, liquefaction, possible lateral spread, and expansive soils. Thus, all geologic impacts identified for the Proposed Project (see Section 2.5, Geology Soils and Seismicity) would be avoided under the No Development No Project Alternative.

Buildout No Project Alternative

Under the Buildout No Project Alternative, it is anticipated that approximately 1,000 acres of the Project site would be developed. This would result in more site disturbance relative to the Project. In addition, the buildout includes up to 1,100 residential unit and other units, while the Proposed Project would be an unstaffed operation (except for routine O&M). Thus, the Buildout No Project Alternative impacts related to underlying geologic conditions would be potentially greater than the Project due to the increased impact area as well as a greater potential risk to impact lives and property. Thus, the impacts related to potential static settlement, liquefaction, possible lateral spread and expansive soils during construction and operation (**Impacts GEO-1 and GEO-2**) would be increased by the buildout No Project Alternative. Similar to the Project, it is expected that mitigation (similar to **M-GEO-1**) would be feasible to implement to reduce these potential geologic impacts to below a level of significance.

Hazards and Hazardous Materials

No Development No Project Alternative

The No Development No Project Alternative would not involve the construction or operation of any facilities. Thus, the No Development No Project Alternative would avoid the Proposed Project's significant hazards and hazardous materials impacts related to construction and operational-related impacts that could exacerbate wildfire risks (**Impacts HAZ-1 and HAZ-2**) and cumulative impacts to emergency response and wildland fire hazards (**Impacts HAZ-CU-1 and HAZ-CU-2**). While the Proposed Project's hazards and hazardous materials impacts would be reduced to below a level of significance with implementation of mitigation measure **M-WF-1, M-WF-2** and **M-WF-3** that requires the implementation of the design and fire protection measures in the Proposed Project's site specific Fire Protection Plan (FPP) and CFPP and a Fire Protection and Mitigation Agreement, the No Development No Project Alternative would entirely avoid these impacts considering no facilities would be constructed or operated on the Project site. Thus, all hazards and hazardous materials impacts identified for the Proposed Project (see Section 2.6, Hazards and Hazardous Materials) would be avoided under the No Development No Project Alternative.

Buildout No Project Alternative

Similar to the Proposed Project, the Buildout No Project Alternative would include adherence to all regulations pertaining to hazards and hazardous materials. Previously identified asbestos and lead-based paint would be removed by a certified abatement contractor in accordance with CalOSHA, California Department of Public Health, and San Diego County Air Pollution Control District. All hazardous materials would also be handled in accordance with regulations during construction and operations. While the Project site is within the Jacumba Airport Influence Area and within the safety zone areas, the buildout scenario would be required to comply with FAA regulations and provide consistency with the Jacumba Airport ALUCP (ALUC 2020) that would ensure no significant hazards either to the development or the airport would occur. In addition, under the Buildout No Project Alternative, it is anticipated that approximately 1,000 acres of the Project site would be developed, which is larger than the development footprint of the Proposed Project. In addition, the Buildout No Project Alternative includes up to 1,100 residential units and other facilities, while the Proposed Project would be an unstaffed operation (except for routine O&M). With this amount of residential development, the buildout scenario is anticipated to generate 3,165 residents, which would increase the residents in the area from 561 to 3,725 residents (SANDAG 2016). This increase in the number or residents and homes would result in a greater potential risk to impact lives and property by increasing the amount of fire ignition sources on the Project site. Thus, impacts related to wildfire hazards would be potentially greater under this alternative. Even with the implementation of mitigation measures **M-WF-1** (design and fire reduction features in a site-specific FPP), **M-WF-2** (site-specific CFPP), and **M-WF-3** (Fire Protection and Mitigation Agreement that would provide funds used to support fire agency capabilities), the Buildout No Project Alternative creates a greater risk of wildfire hazard that could result in loss, injury or death on the property because there would be more people occupying the site. There is also an increase in the potential to interfere with emergency response even with mitigation. Thus, the direct and cumulative impacts related to potential wildland hazards during construction and operation (**Impacts HAZ-1, HAZ-2, HAZ-CU-1, and HAZ-CU-2**) would be increased by the Buildout No Project Alternative. The cumulative impacts to interference with emergency response, would also be increased by the Buildout No Project Alternative.

Hydrology and Water Quality

No Development No Project Alternative

The No Development No Project Alternative would not involve the construction or operation of any facilities. Thus, the No Development No Project Alternative would avoid the Proposed Project's significant hydrology and water quality impacts associated with potential alteration of drainage patterns and flood hazards due to the perimeter fence during construction and operation of the Proposed Project (**Impact HYD-1**). While the Proposed Project's hydrology and water

quality impacts would be reduced to below a level of significance with implementation of mitigation measure **M-HYD-1** that requires a perimeter fencing and layout plan that avoids the blockage and/or redirection of storm flows (see Section 2.7, Hydrology and Water Quality), the No Development No Project Alternative would entirely avoid this impact considering no facilities would be constructed or operated on the Project site. Thus, all hydrology and water quality impacts identified for the Proposed Project (see Section 2.7, Hydrology and Water Quality) would be avoided under the No Development No Project Alternative.

Buildout No Project Alternative

The Buildout No Project Alternative would be required to comply with all applicable hydrology and water quality regulations. The Project site is not located within a dam or tsunami inundation area. The Buildout No Project Alternative would be required to prepare a Stormwater Pollution Prevention Plan in accordance Regional Water Quality Control Board requirements and a National Pollutant Discharge Elimination System (NPDES) permit. Operational water quality management plans would also be required, as applicable. However, under the Buildout No Project Alternative, the development of up to 1,110 residences and a golf course would result in a substantial water demand. Water service in the region consists exclusively of groundwater wells and most rely on the Jacumba Community Services District (JCSD) or private groundwater wells. The Project site is within the Jacumba Valley Groundwater Basin (Basin), DWR Basin No. 7-47 (DWR 2016; Figure 3.1.4-4), and the Jacumba Valley alluvial aquifer. DWR has designated the Basin as very low priority (DWR 2019). Based on calculations provided in the Groundwater Resources Investigation Report (Appendix J), current groundwater in storage within the Jacumba Valley alluvial aquifer is estimated to be 9,005 acre-feet. A detailed water demand estimate prepared for the Jacumba Valley Ranch EIR (Table No. 3 Groundwater Use) estimated that 828 acre-feet per year would be required for project components including golf course irrigation (TRS Consultants 1999). For comparison, the total estimated groundwater extraction for the 40-year lifetime of the Proposed Project is 1,673 acre-feet or about two years of water demand required for the Buildout No Project Alternative. Thus, the Buildout No Project Alternative could result in a water demand that would exceed the threshold of 50% reduction in groundwater storage during prolonged dry periods. Impacts to groundwater could be potentially significant under the buildout scenario. The Proposed Project's impacts to groundwater in storage would be less than significant (see Section 2.7, Hydrology and Water Quality). Therefore, the Buildout No Project Alternatives impacts to groundwater are anticipated to be greater than the Project.

In addition, under the Buildout No Project Alternative, it is anticipated that approximately 1,000 acres of the Project site would be developed with a multi-use development that would include occupied structures. This alternative would result in a substantial increase in impervious surfaces above the 643 acres of development for the Proposed Project (with only 1.9 acres of impervious

surfaces). With an increase in impervious surfaces, the amount of surface runoff on the site would increase and potentially impair or redirect drainage patterns and increase flood flows to a much larger extent. It is anticipated that this alternative may require substantially more mitigation measures than what is required for the Proposed Project, which only required a fencing and layout plan for break-away fencing (**M-HDY-1**). In addition, the Buildout No Project Alternative includes up to 1,100 residential units and other facilities, while the Proposed Project would be unmanned operation (except for routine O&M). Under the buildout scenario, this alternative is anticipated to generate 3,165 residents, which would increase the residents in the area from 561 to 3,725 residents (SANDAG 2016). This increase in residents would increase potential sources for pollution to surface runoff and would potentially cause new impacts to water quality in the area. Thus, the impacts related to potential drainage patterns and flood flows (**Impacts HYD-1**) and other water quality impacts would be increased by the Buildout No Project Alternative.

Mineral Resources

No Development No Project Alternative

The No Development No Project Alternative would not involve the construction or operation of any facilities and the Project site would remain in its existing condition. Thus, the No Development No Project Alternative would avoid the Proposed Project's significant and unavoidable impacts associated with the permanent loss of availability of known mineral resources that are minable, processable and marketable (**Impact MR-1**). This impact occurs under the Proposed Project because a portion of the biological open space easements (188 acres) required as mitigation for biological resource impacts, and the 3.2-acre switchyard would result in the permanent loss of availability of a known mineral resource. No feasible mitigation exists to reduce impacts to below a level of significance; therefore, impacts to mineral resources would remain significant and unavoidable under the Proposed Project (see Section 2.8, Mineral Resources). The No Development No Project Alternative would entirely avoid this impact considering no facilities would be developed on the Project site and no impacts to biological resources requiring habitat preservation would occur. Thus, the impact to mineral resources identified for the Proposed Project (see Section 2.8, Mineral Resources) would be avoided under the No Development No Project Alternative.

Buildout No Project Alternative

Under the Buildout No Project Alternative, it is anticipated that approximately 1,000 acres of the Project site would be developed, which is greater than the development footprint of the Proposed Project (643 acres). The buildout scenario would include a multi-use development that would include permanent development such as 1,100 residential units and an 18-hole golf course.

Under the buildout scenario, 1,000 acres of the Project site would be developed and the Project would result in the permanent loss of availability of any underlying mineral resources. In addition, it is likely that on-site biological open space easements would be provided which would further increase the loss of availability of any underlying mineral resources. In comparison, the Proposed Project would result in the permanent loss of availability of mineral resources within 188 acres of the biological open space easement and the 3.2-acre switchyard. Thus, the permanent loss of a known mineral resources under the Buildout No Project Alternative is anticipated to be higher than the loss caused by the Proposed Project (**Impact-MR-1**). Therefore, impacts related to mineral resources would be increased by the Buildout No Project Alternative. The impact would remain significant and unavoidable.

Noise

No Development No Project Alternative

No noise would be generated by the No Build No Project Alterative, as the site would remain in its existing conditions, and no construction or operations would occur. As a result, the No Development No Project Alternative would avoid all impacts related to noise associated with the Proposed Project. This includes avoidance of the operational panel cleaning noise (**Impacts NOI-1 and NOI-2**) and the construction-related noise (**Impact NOI-3**). These operational and construction-related noise impacts would be ultimately reduced to below a level of significance by the Proposed Project via **M-NOI-1** (requires an updated Acoustical Analysis Report be submitted to ensure that the final design, layout and specification of major noise-producing stationary equipment will yield noise levels that are compliant with County noise standards), **M-NOI-2** (requires a PV Panel Washing Plan to ensure the noise from mobile PV panel washing equipment operating in proximity to adjacent property lines would not exceed County standards), and **M-NOI-3** (requires the submittal of a Construction Noise Management Plan to ensure that noise generation from construction activities are aligned with the assumptions and evaluation parameters used in the 2020 Acoustical Analysis Report, prior to work commencing). Per the above, all noise impacts identified for the Proposed Project (see Section 2.9, Noise and Vibration) would be avoided under the No Development No Project Alternative.

Buildout No Project Alternative

Under the Buildout No Project Alternative, it is anticipated that approximately 1,000 acres would be developed, which is greater than the Proposed Project development footprint (643 acres). Therefore, construction would involve more grading and more construction activities than the Proposed Project. It is anticipated that construction activities would be located adjacent to the existing Jacumba Hot Springs residential properties, as well as future residential uses associated with the buildout scenario. Thus, it is expected that the construction noise impacts of the

Buildout No Project Alternative would be potentially greater than the significant construction noise impact of the Project (**Impact NOI-2**). Similar to the Project, it is expected that construction noise mitigation (similar to **M-NOI-3**) could be implemented to reduce this impact to below a level of significance.

In addition, the buildout scenario would result in noise-sensitive residential land uses on the Project site, as well as potentially noise-generating uses such as the wastewater treatment plant and uses that include heating, ventilation, air condition (HVAC) equipment in proximity to noise-sensitive uses. Thus, this alternative has the potential to result in stationary noise that would exceed the County's property line noise limits identified in Section 36.404 of the County Noise Ordinance. Relative to the Project, both the Project and the Buildout No Project Alternative would result in potential exceedance of the County Noise Ordinance (**Impact NOI-1**) during operations. Similar to the Project, it is expected that noise mitigation measures such as submitting a predictive operations noise analysis for stationary equipment (**M-NOI-1**) and mobile equipment (**M-NOI-2**) that analyzes noise-generating equipment could be implemented to reduce these potential operational noise impacts to below a level of significance.

The Buildout No Project Alternative would include residences and potentially a school within two miles of the Jacumba Airport. As indicated in the Airport Land Use Compatibility Plan (Airport Land Use Commission [ALUC] 2020), the Jacumba Airport does not generate noise above 60 decibels. As such, the Buildout No Project Alternative development would not be expected to expose noise sensitive land uses to significant airport noise. No significant airport land use noise impacts would occur under either the Project or the Buildout No Project Alternative.

Development under the buildout scenario would add a significant amount of traffic to local roadways where traffic levels are currently relatively low. All other factors being equal, it requires a doubling of traffic volumes to cause a 3 dB increase (i.e., 3 dB = 10*LOG[2]). The SANDAG Transportation Forecast Information Center (TFIC) Series 13 forecasts that Old Highway 80 would have a volume of 800 average weekday traffic (AWT) east of Campo Street and approximately 2,000 AWT per day west Campo Street as of 2020. Carrizo Gorge was also forecast to have an 800 AWT in 2020 (SANDAG 2019). These local roadways provide access from Jacumba Hot Springs to the I-8 as well as to other local communities such as Boulevard and Campo. Under the buildout scenario, up to 1,100 residential units are anticipated. With the addition of approximately 1,110 residents at 10 trips per residence and an 18-hole golf course at 40 trips per hole, the buildout scenario would generate a minimum of 11,820 trips (SANDAG 2002). The build out scenario is also anticipated to generate 3,165 residents, which would increase the residents in the area from 561 to 3,725 residents (SANDAG 2016). As such, it is expected that the Buildout No Project Alternative would double traffic on these local roadways. Considering residential and other noise sensitive land uses such as passive parks are located adjacent to these roadways, it is expected that the Buildout No Project Alternative would result

in significant mobile source noise impacts. If it was not feasible to implement noise reduction measures, such as a sound wall, due to right-of-way or other constraints, then this impact could be significant and unavoidable. Thus, the mobile source impacts of the Buildout No Project Alternative would be greater than the Proposed Project.

Paleontological Resources

No Development No Project Alternative

Under the No Development No Project Alternative, the paleontological resources on the Project site would not be disturbed. Therefore, no impacts to paleontological resources would occur under this alternative. When compared to the Proposed Project, the no development No Project Alternative would avoid all impacts to paleontological resources. Specifically, the Proposed Project would require over 2,500 cubic yards of grading in areas of "high" and "moderate" paleontological resource and would therefore result in a potentially significant impact (**Impact PR-1**) to paleontological resources. The Proposed Project would reduce this potential impact by implementing mitigation measure **M-PR-1** that includes a Paleontological Resources Impact Mitigation Program (PRIMP) with monitoring. While the Proposed Project would ultimately reduce paleontological resource impacts to below a level of significance, the No Development No Project Alternative would completely avoid all paleontological resource impacts identified for the Project (see Section 2.10, Paleontological Resources).

Buildout No Project Alternative

Under the Buildout No Project Alternative, it is anticipated that approximately 1,000 acres would be developed, which is an increase of 257 acres compared to the Proposed Project. As a result, more grading could occur within "high" and "moderate" paleontological resource areas relative to the Project. Thus, the impacts related to potentially significant paleontological resources (**Impact PR-1**) would be increased under the Buildout No Project Alternative. Similar to the Proposed Project, it is expected that mitigation (similar to **M-PR-1**) would be feasible to implement to reduce these potential paleontological resource impacts to below a level of significance.

Tribal Cultural Resources

No Development No Project Alternative

The No Development No Project Alternative would result in no changes to the existing conditions. Therefore, no impacts to tribal cultural resources would occur under this alternative. When compared to the Proposed Project, the no development scenario would avoid all impacts to tribal cultural resources. This includes avoidance of **Impact TCR-1** related to the Project's development activities which could affect tribal cultural resources within 50 feet of the Project Area

of Determined Impact (ADI) or within resource-specific, predetermined buffers, and has the potential to affect undiscovered tribal cultural resources, including human remains and archaeological resources that may qualify as tribal cultural resources. The Proposed Project would mitigate these impacts to below a level of significance with implementation of mitigation measures **M-TCR-1** (temporary fencing) and **M-TCR-2** (archaeological and tribal monitoring). While these impacts would be reduced to below a level of significance with implementation of mitigation measures, the No Development No Project Alternative would completely avoid impacts to tribal cultural resources identified for the Project (see Section 2.11, Tribal Cultural Resources).

Buildout No Project Alternative

The Buildout No Project Alternative is anticipated to develop approximately 1,000 acres, which is 257 acres more than the Proposed Project. With more ground disturbance in proximity to areas identified as tribal cultural resources, the potential impact to tribal cultural resources would be greater. Thus, impacts related to tribal cultural resources (**Impact TCR-1**) would be greater relative to the Proposed Project. Similar to the Project, it is expected that mitigation (similar to **M-TCR-1** to **M-TCR-2**) would be feasible to implement to reduce these potential tribal cultural resource impacts to below a level of significance.

Wildfire

No Development No Project Alternative

The majority of the Project site is located within a High Fire Hazard Severity Zone (FHSZ), with a western portion within a Moderate FHSZ and a small area located within a Very High FHSZ (CAL FIRE 2007a), as detailed in Section 2.12, Wildfire. Existing conditions would remain under the No Development No Project Alternative, thus this alternative would not have any construction or operational activities that would increase wildfire risks. The No Development No Project Alternative would avoid the Project's significant direct and cumulative wildfire impacts related to operational-related wildfire risk (**Impact WF-1** and **WF-CU-1**), construction-related wildfire risk (**Impact WF-2** and **WF-CU-2**) and the installation or maintenance of associated infrastructure that may exacerbate fire risk during construction and operation (**Impact WF-3**). While these impacts would be reduced to below a level of significance with the implementation of mitigation measures **M-WF-1** (fire hazard reduction measures in a site-specific Fire Protection Plan), **M-WF-2** (site-specific CFPP), and **M-WF-3** (Fire Protection and Mitigation Agreement that would provide funds used to support fire agency capabilities), the No Development No Project Alternative would entirely avoid these impacts. As discussed above, all wildfire impacts identified for the Proposed Project (see Section 2.12, Wildfire) would be avoided under the No Development No Project Alternative.

Buildout No Project Alternative

Under the Buildout No Project Alternative, approximately 1,000 acres would be developed for a multi-use development. It is anticipated that the buildout scenario would result in more construction fire risks due to the increased area of disturbance and likely longer construction period. In regard to operations, the buildout scenario would add up to 1,100 residences and approximately 3,165 residents. This increase in the number of residents and homes would result in a greater potential risk to impact lives and property. Thus, the impacts related to potential operational and construction-related fire risk (**Impacts WF-1 and WF-2**) would be increased under the Buildout No Project Alternative. In addition, due to the increased amount of infrastructure that would be required for the construction and operation under the buildout scenario, the fire risk during construction and operation would be exacerbated under this alternative (**Impact WF-3**). Similar to the Proposed Project, the Buildout No Project Alternative would implement the fire hazard reduction measures of a project-specific Fire Protection Plan (FPP) (**M-WF-1**), as well as the risk reduction and daily fire prevention measures in a Construction FPP (CFPP) (**M-WF-2**). Also, similar to the Proposed Project, future development of the Project site would be required to participate in a Fire Protection and Mitigation Agreement (**M-WF-3**) to ensure the development provided sufficient fire protection services and facilities, or paid its fair share. Also, the Buildout No Development Alternative would result in residential development within an area at risk from wildfires and would result in the increased of exposure of people to air quality pollutants from wildfires. As such, wildfire impacts of the Buildout No Project Alternative would be greater than the impacts of the Proposed Project (see Section 2.12, Wildfire).

Other Resource Topics

Due to the substantial difference between the buildout scenario and the Proposed Project, additional details regarding each of the other resource topics is provided below for the Buildout No Project Alternative.

Agriculture and Forestry Resources

Based on the LARA Model, the Project site does not include important agricultural resources (see Section 3.1.1, Agricultural Resources). Therefore, similar to the Proposed Project, the Buildout No Project Alternative would have a less than significant impact to agricultural resources.

Energy

The Buildout No Project Alternative would result in energy use during construction and operations. However, it is not anticipated that the residential buildings would result in a wasteful or inefficient use of electricity considering compliance with Title 24 would be required. During operations, it is expected that the Buildout No Project Alternative would increase gasoline fuel consumption relative to the Project because the buildout scenario would add 1,110 residences

and the distance from existing services and employment centers. With the addition of approximately 1,110 residents at 10 trips per residence and an 18-hole golf course at 40 trips per hole, the buildout scenario would generate a minimum of 11,820 trips per day (SANDAG 2002). The Buildout No Project Alternative would generate 3,165 residents, which would increase the residents in the area from 561 to 3,725 (SANDAG 2016). Overall, screening maps based on SANDAG 2012 data indicate the Project site is within a census tract of more than 125 percent of the regional residential and employee vehicle miles traveled mean (City of Chula Vista 2020a, 2020b). With the substantial increase in trips and those trips lengths being over 125 percent of the regional mean, this increase in energy usage would be relatively inefficient within the region. Thus, the Buildout No Project Alternative would result in a potentially significant impact related to Energy, while the Proposed Project would result in a less than significant impact to energy (see Section 3.1.2, Energy). Thus, the Buildout No Project Alternative would have a greater energy impact compared to the Proposed Project.

Greenhouse Gas Emissions

The estimated total GHG emissions during the 13-month construction period of the Proposed Project would be approximately 5,764 MT CO2e. Estimated Proposed Project-generated construction emissions amortized over the Proposed Project life of 35 years would be approximately 165 MT CO2e per year. The estimated total GHG emissions during decommissioning would be approximately 2,405 MT CO2e. Estimated Proposed Project-generated decommissioning emissions amortized over the Proposed Project life of 35 years would be approximately 69 MT CO2e per year. However, the Proposed Project is also expected to produce 211,159 megawatt hours of electricity per year, providing a renewable energy source to achieve the RPS of 60% by 2030 and 100% by 2045. This renewable energy would offset 423,254 MT CO2 from 2022 through 2044, reducing GHG emissions generated by fossil-fuel power plants during that time frame. After subtracting avoided GHG emissions from the Project's GHG emissions, the Proposed Project would avoid approximately 296,744 MT CO2 e over its lifetime. These GHG emissions are anticipated to be lower than the GHG emissions generated from construction of this alternative because the buildout scenario would generate GHG emissions from the construction of 1,100 residential units, other facilities and an 18-hole golf course.

The Buildout No Project Alternative is anticipated to result in substantially greater Vehicle Miles Traveled (VMT) annually, based on approximately 1,100 residential units, as compared to the Proposed Project, which would result in an average daily trip rate of 12 and 315,360 annual VMT. Thus, the GHG emissions from the Buildout No Project alternative would be far more than the emissions generated by the Proposed Project. The buildout scenario would also generate GHG emissions from the addition of 1,100 residential units, an 18-hole golf course, and other uses. The Buildout No Project Alternative would not assist with obtaining the RPS goals. This alternative also would not provide residences where there are mobility choices and would not

focus growth in an urbanized area. Given the information discussed under Energy above, it is expected that the mobile source emissions generated by the Buildout No Project Alternative would be above the regional mean due to its location in a rural area away from services and employment areas. Thus, the Buildout No Project Alternative would result in potentially significant GHG emission impacts. The Proposed Project would result in less than significant impacts (see Section 3.1.3, GHG Emissions). Thus, the greenhouse gas emission impacts under the Buildout No Project Alternative would be greater than the Proposed Project.

Land Use and Planning

The Buildout No Project Alternative assumes compliance with the applicable land use and planning documents. Thus, the Buildout No Project Alternative would have a less than significant impact related to land use and planning, similar to the Proposed Project (see Section 3.1.4, Land Use and Planning).

Parks and Recreation

The Buildout No Project Alternative would include the construction of 1,110 residential units that would generate a demand for parks and recreation. As this alternative is assumed to comply with the applicable land use plans and such plans indicate supporting recreational uses would be provided, it is assumed that adequate park and recreation would be provided to support the additional park demand generated by the Buildout No Project Alternative development. Thus, similar to the Proposed Project (see Section 3.1.5, Parks and Recreation), the Buildout No Project Alternative's impacts related to parks and recreation would be less than significant.

Population and Housing

The Buildout No Project Alternative development is anticipated to include up to 1,100 residential units. No occupied housing currently exists on the Project site that would be displaced by development. The Buildout scenario would not result in unplanned growth for the area. The Buildout No Project Alternative would result in less than significant impacts related to population and housing similar to the Proposed Project (see Section 3.2, Effects Found Not to be Significant in Initial Study).

Public Services

The Buildout No Project Alternative would generate a significant demand for public services considering it would include 1,110 residential units and other supporting uses. The existing public service infrastructure would likely require improvements in order to provide adequate public services to the buildout No Project Alternative. The Buildout No Project Alternative would be required to ensure adequate public services would be provided for the proposed

development. As such, public services impacts would be less than significant similar to the Proposed Project (see Section 3.1.6, Public Services).

Transportation

The operation of the Proposed Project is conservatively estimated to generate 20 daily trips. Therefore, utilizing the guidance provided by the County of San Diego Transportation Study Guidelines (TSG), adopted in June 2020, the operation of the Proposed Project would not generate a significant number of trips and thereby would not cause a substantial amount of VMT. Therefore, the operation of the Proposed Project would not conflict with or be inconsistent with CEQA Guidelines Sections 15064.3(b)(1) and 15064.3(b)(3), and impacts would be less than significant.

The Buildout No Project Alternative would generate substantially more VMT during operations as compared to the Proposed Project. Under the buildout scenario, up to 1,100 residences would be constructed. VMT tends to increase as land use density increases and travel becomes more reliant on the use of the automobile due to the long distances between origins and destinations. Transportation impacts under the Buildout No Project Alternative would be substantially greater and would not be less than significant.

Utilities and Service Systems

The Buildout No Project Alternative would generate increased demand for utilities and service systems, including wastewater treatment, water, stormwater, electrical, and solid waste. With the development of 1,110 residences and a golf course would result in a substantial water demand. Water service in the region consists exclusively of groundwater wells and most rely on the Jacumba Community Services District (JCSD) or private groundwater wells. The Project site is within the Jacumba Valley Groundwater Basin (Basin), and the Jacumba Valley alluvial aquifer. Thus, impacts to water facilities could be potentially significant under the buildout scenario. The Proposed Project's impacts to groundwater in storage would be less than significant. Therefore, the Buildout No Project Alternative's impacts to groundwater are anticipated to be greater than the Project. In addition, the Proposed Project would not require wastewater treatment, potable water, or operational solid water services, and the impacts were determined to be less than significant (Section 3.1.8, Utilities and Service Systems). The Buildout No Project Alternative would have substantially greater potential impacts on utilities and services systems compared to the Proposed Project.

4.4 Analysis of the Community Buffer Alternative

4.4.1 Community Buffer Alternative Description and Setting

The Community Buffer Alternative, as shown in Figure 4-1, would include a 300-foot buffer adjacent to private properties north of Old Highway 80 in the Jacumba Hot Springs community.

This buffer area is intended to specifically provide a visual buffer between the proposed solar facility and the private properties, as well as a noise buffer from residential uses during construction and operations. The 15.4-acre buffer area would remain in its current undeveloped condition.

The inclusion of the 15.4-acre buffer would result in 17,496 fewer PV modules installed. Overall, the Community Buffer Alternative would include 282,504 PV modules instead of the Proposed Project's 300,000 PV modules. This reduction in PV modules would reduce energy generated by approximately 7.7 MW relative to the Proposed Project. With this reduction, the Community Buffer Alternative would generate 82.3 MW compared to the Proposed Project's generation of 90 MW. The battery energy storage system, switchyard, overhead and underground lines and other project components would be the same as the Proposed Project. The length of construction may be slightly reduced under this Alternative, but the daily construction would remain the same as the Proposed Project.

4.4.2 Comparison of the Effects of Community Buffer Alternative to the Proposed Project

Aesthetics

Under the Community Buffer Alternative, the visual impacts would be the same as described for the Proposed Project with the exception of the western buffer area. No construction would occur within this 300-foot wide buffer area. This would specifically affect Key View 6 which is located within the Jacumba Hot Springs community. The location from which Key View 6 was taken is shown on EIR Figure 2.1-8a. The existing condition of Key View 6 is shown in EIR Figure 2.1-14 and looks to the east with a view of fallow agricultural land with hills and mountains in the distance. EIR Figure 2.1-14 also includes a visual simulation of the Proposed Project. The simulation shows slatted fencing, landscaping, and the tops of the solar panels in the foreground. The fallow agricultural area is not visible and only the uppermost elevation of distant mountains are visible.

Under the Community Buffer Alternative, the fencing, landscaping, and solar panels would be set back 300 feet further from the adjacent properties. The 300-foot buffer area would remain in its existing condition. Thus, the foreground view would remain undisturbed and this would provide a visual buffer between the community and the solar facility.

Similar to the Proposed Project, the Community Buffer Alternative would include **M-AE-1 – M-AE-3** (softer colors for project components), **M-AE-5** (landscaping buffers) and **M-AE-6** (slatted screening fencing). Note that **M-AE-4** would not apply, as it included a smaller residential buffer area than included in the Community Buffer Alternative and would be moot under this alternative. Although the 300-foot buffer would lessen visual impacts to adjacent

properties north of Old Highway 80, the Community Buffer Alternative would result in a significant impact to visual quality and the character. Thus, **Impacts AE-1** and **AE-2** would be lessened under the Community Buffer Alternative, but not to below a level of significance since the impacts to visual character change would still occur on the remaining portion of the site.

The Community Buffer Alternative would not avoid or substantially lessen the panoramic view impacts of the Project along I-8 (**Impact AE-3**), Old Highway 80 (**Impact AE-4**), Jacumba Community Park (**Impact AE-5**), State Parks lands (Anza-Borrego Desert State Park Lands and Carrizo Gorge Wilderness) to the west of the Project (**Impact AE-6**), Round Mountain (**Impact AE-7**), Airport Mesa (**Impact AE-8**), or Table Mountain (**Impact AE-9**). The Community Buffer Alternative would result in significant impacts similar to the Proposed Project (see Section 2.1, Aesthetics).

Overall, the Community Buffer Alternative would lessen aesthetic **Impacts AE-1 and AE-2**, but these impacts would remain significant and unavoidable. **Impacts AE-CU-1, AE-CU-2, AE-3, AE-4 AE-5, AE-6**, **AE-5**, **AE-6** and **AE-7** would be the same under the Community Buffer Alternative as the Project, and would remain significant and unavoidable.

Air Quality

The Community Buffer Alternative would include less construction activities than the Proposed Project, which would reduce air quality emissions during construction. The construction diesel exhaust emissions from the Proposed Project was determined to result in a cancer risk on site above the 1 in 1 million threshold without application of T-BACT (**Impact AQ-1**). The Community Buffer Alternative would provide a 300-foot buffer from residential uses, which would result in additional area for the diesel particulate matter to settle and would reduce diesel particulate matter reaching residential receivers in the Jacumba Hot Springs community. None-the-less, workers would still be subject to elevated diesel particulate matter levels. The slight reduction of the construction area by about 15.4 acres (2%) under the Community Buffer Alternative would reduce impacts to construction workers negligibly. Given that the Project cancer risk from construction exhaust was 2.93 in a million and was well over the 1 in a million County Guidelines threshold for the Proposed Project, the provision of a 300-foot buffer north of Old Highway 80 would not reduce this impact to below a level of significance. Overall, the Community Buffer Alternative would reduce the cancer risk relative to the Project, but the impact would remain significant. Similar to the Proposed Project, the Community Buffer Alternative could implement **M-AQ-1** to reduce this TAC impact to below a level of significance.

The Proposed Project construction emissions of NO_x, PM_{10}, and $PM_{2.5}$ would exceed the daily emissions threshold of significance (**Impact AQ-CU-1**). The Community Buffer Alternative would reduce the overall construction area by approximately 15.4 acres. The duration of construction may

be slightly reduced under this Community Buffer Alternative relative to the Proposed Project, but the per day activities are expected to be similar to the Project. Thus, it is expected that the Community Buffer Alternative impacts related to daily criteria pollutant emissions would be similar to the Project and would exceed the daily emissions threshold of significance for NO_x, PM_{10}, and $PM_{2.5}$. Similar to the Project, the Community Buffer Alterative could implement **M-AQ-1** and **M-AQ-2** to reduce **Impact AQ-CU-1** to below a level of significance.

Biological Resources

The Community Buffer Alternative would avoid a 15.4-acre area along the western Project boundary, north of Old Highway 80. This buffer area contains 3.29 acres of desert saltbrush scrub and 10.7 acres of fallow agriculture. The remaining impacts are to disturbed or developed lands which do not require mitigation. The County of San Diego guidelines state that desert saltbrush scrub must be mitigated at a 2:1 ration (6.78 acres) while fallow agriculture requires mitigation at a 0.5:1 ratio (5.35 acres). Therefore, total mitigation requirements (**M-BI-3**) under the Community Buffer alternative would be reduced by 12.13 acres. The avoidance of desert saltbrush scrub would reduce permanent direct impacts to sensitive vegetation communities (**Impact BI-V-2**). As shown on EIR Figure 2.3-7, Impacts to Biological Resources, the Community Buffer Alternative would also reduce permanent direct impacts to special status wildlife which may utilize these vegetation communities (e.g., Lawrence's Goldfinch, Vaux's swift, and tri-colored blackbird) (**Impact BI-W-2**). Also, refer to Table 2.3-3, Permanent Impacts to Special-Status Wildlife Species Present within the Project Area or with High Potential to Occur, for these species known to occur or with high potential to occur within these habitat types. The area featuring fallow agriculture also provides biological value as raptor foraging, and the avoidance of that area would reduce impacts to foraging habitat (**Impact BI-W-2**). All other impacts of the Community Buffer Alternative would be similar to the Proposed Project, including special status plants (**Impacts BI-SP-1** to **BI-SP-4**), other special status wildlife (**Impacts BI-W-1** and **BI-W-2, BI-W-5, BI-W-6**), nesting birds (**Impacts BI-W-3**), bats (**Impacts BI-W-4**), wildlife movement (**Impacts BI-WLC-1** to **WLC-3**), core wildlife area (**Impacts BI-WLC-2**), burrowing owls (**Impact W-2**), other riparian habitat and sensitive vegetation communities (**Impacts BI-V-1** to **BI-V-4**), and jurisdictional resources (**Impacts BI-JAR-1** to **BI-JAR-3**). These impacts would be similar to the Project considering the habitat avoided by the Community Buffer Alternative is primarily fallow agriculture and would not preserve a wildlife core or linkages, and doesn't include jurisdictional waters. The Community Buffer Alternative could implement mitigation measures **M-BI-1** to **M-BI-12** that include biological monitoring; habitat preservation; construction-related indirect or temporary avoidance measures; resource management plan; nesting bird and bat surveys; bat roost avoidance; prevention of invasive plant species; O&M guidelines; and noise reduction measures to reduce impacts to below a level of significance. Overall, the Community Buffer Alternative would

lessen impacts to biological resources, however, the impacts would remain potentially significant but could be reduced to less than significant with implementation of mitigation measures, similar to the Project (see Section 2.3, Biological Resources).

Cultural Resources

Under Community Buffer Alternative, the impact area would be reduced by 15.4-acres along the western boundary adjacent to the community of Jacumba Hot Springs. The Community Buffer Alternative would slightly reduce potential impacts to undiscovered cultural resources and undiscovered human remains considering the impact area would be reduced, but the reduction would not be considered substantial considering this Alternative would impact 627.7 acres, which is 98% of development footprint of Project. Thus, impacts to undiscovered cultural resources (**Impact CR-1**) and undiscovered human remains (**Impact CR-2**) of the Community Buffer Alternative would be similar to the Project, and would be potentially significant.

The Community Buffer Alternative would avoid impacts to two isolates (P-37-038627 and P-37-038626). Isolates are by definition not significant. Overall, the Community Buffer Alternative would directly impact 28 archaeological sites, similar to the Project. Thus, this alternative would have similar impacts to County important sites as the Project.

The Community Buffer Alternative could implement mitigation measures **M-CR-1** through **M-CR-4** that require temporary fencing, archaeological monitoring, a Cultural Resources Treatment Agreement and Preservation Plan, and Long-term Preservation of Resources to reduce **Impacts CR-1** to **CR-4** to below a level of significance, similar to the Project (see Section 2.4, Cultural Resources).

Geology, Soils, and Seismicity

The Community Buffer Alternative would reduce the impact area by 15.4 acres along the southwestern boundary of the Project site adjacent to the Jacumba Hot Springs community. As the impact area would be reduced, the Community Buffer Alternative would slightly reduce the Project's significant geologic impact related to potential static settlement, liquefaction, possible lateral spread and expansive soils during construction and operation (**Impacts GEO-1** and **GEO-2**). However, given the Community Buffer Alternative reduction would be only 15.4 acres of the 643-acre development area proposed by the Project (2%), the impact reduction would not be substantial and the geologic impact would be similar to the Proposed Project. These impacts could be reduced to below a level of significance by **M-GEO-1** that requires a final site-specific geotechnical report that demonstrates compliance with the California Building Code requirements similar to the Project (see Section 2.5, Geology, Soils and Seismicity).

Hazards and Hazardous Waste

The Community Buffer Alternative would reduce the impact area by 15.4 acres along the western boundary of the Project site adjacent to the Jacumba Hot Springs community. While potential wildfire hazard impacts would be slightly reduced by maintaining a 300-foot buffer between development and adjacent residential uses within the community of Jacumba Hot Springs, the Community Buffer Alternative would also have potentially significant hazard impacts similar to that of the Proposed Project. Potential impacts related to operational-related wildfire hazards (**Impact HAZ-1**), and construction-related wildfire hazards (**Impact HAZ-2**) would occur under this Alternative. Similar to the Project, the development under this alternative would be required to implement the design and fire protection measures in a project-specific FPP (**M-WF-1**), as well as the risk reduction and daily fire prevention measures in a project-specific CFPP (**M-WF-2**). Also similar to the Project, the development under this alternative would be required to participate in a Fire Protection and Mitigation Agreement (**M-WF-3**) to ensure the development paid its fair share toward providing fire protection services and facilities. Nonetheless, the Community Buffer Alternative would result in development within an area at risk from wildfire hazards. In addition, the Community Buffer Alternative would slightly reduce the Project's significant cumulative impacts to interference with emergency response and wildland fire hazards (**Impacts HAZ-CU-1** and **HAZ-CU-2**). These impacts could be reduced below a level of significance with mitigation such as **M-WF-1, M-WF-2** and **M-WF-3** similar to the Proposed Project. Thus, the wildfire hazard impacts of the Community Buffer Alternative would be similar but slightly less than that of the Proposed Project (see Section 2.6, Hazards and Hazardous Materials).

Hydrology and Water Quality

The Community Buffer Alternative would reduce the impact area by 15.4 acres along the western boundary of the Project site adjacent to the Jacumba Hot Spring community. It is anticipated that the Community Buffer alternative would have similar impacts to the Proposed Project's potentially significant hydrology and water quality impacts associated with potential alteration of drainage patterns and flood hazards due to the perimeter fence during construction and operation (**Impact HYD-1**). This impact would be reduced to below a level of significance with implementation of mitigation measure **M-HYD-1** that requires a perimeter fencing and layout plan that avoids the blockage and/or redirection of storm flows (see Section 2.7, Hydrology and Water Quality).

Mineral Resources

The Proposed Project would result in a significant and unavoidable impact to mineral resources (**Impact MR-1**). This impact is a result of a portion of the biological open space easement

(which will total up to 435 acres) overlying 188 acres of mineral resources. The mitigation is for impacts to biological resources (see Section 2.8, Mineral Resources). The Community Buffer Alternative would avoid a 15.4-acre area along the western Project boundary, north of Old Highway 80. This buffer area contains 3.29 acres of desert saltbrush scrub and 10.7 acres of fallow agriculture. The County of San Diego guidelines state that desert saltbrush scrub must be mitigated at a 2:1 ratio (6.78 acres) while fallow agriculture requires mitigation at a 0.5:1 ratio (5.35 acres). Therefore, under the Community Buffer alternative, the total mitigation requirement for habitat would be reduced by 12.13 acres to 422.87 acres of potential biological open space easements. Using the most conservative assumption, this reduction in required open space easements would reduce the alternative's impact to 175.87 acres of mineral resources. This reduction in biological open space easement requirements would reduce the amount of permanent loss of availability of mineral resources, as compared to the Proposed Project. However, the value of mineral resources that would be permanently unavailable would still exceed the County's minimum value threshold. As no feasible mitigation exists to reduce impacts to below a level of significance, impacts to mineral resources would remain significant and unavoidable under this alternative.

Noise

The Community Buffer Alternative would avoid construction and operation activities within 300 feet of adjacent private properties in the Jacumba Hot Springs community. As noise attenuates over distance, this buffer would reduce noise impacts to adjacent properties. Specifically, this would reduce potential significant Project impacts associated with operational stationary equipment noise (**Impact NOI-1**), operational panel cleaning noise (**Impact NOI-2**) and the construction-related noise (**Impact NOI-3**). While these noise impacts would be reduced under the Community Buffer Alternative, they would remain potentially significant. As detailed in the Acoustical Analysis Report (Appendix M), the operational panel cleaning noise within 450 feet of residential uses would lead to potential operational noise impacts. The Community Buffer would ensure the stationary source equipment would be located a minimum of 300-foot buffer from the community; however, other areas would not be avoided and a potential stationary equipment noise impact (**Impact NOI-1**) could continue to occur. As such, the impact would be reduced but not to below a level of significance. As the proposed buffer under the Community Buffer Alternative would be 300 feet only, this impact would remain potentially significant. Similarly, construction noise (**Impact NOI-3**) would be reduced, but would also likely remain potentially significant. These noise impacts could be reduced to less than significant through implementation of mitigation measure **M-NOI-1** (requires an updated Acoustical Analysis Report to ensure noise-producing stationary equipment would be compliant with County noise standards), (**M-NOI-2** (PV Panel Washing Plan to ensure the noise from mobile PV panel washing equipment operating would not exceed County standards), and **M-NOI-3** (Construction

Noise Management Plan to ensure that noise generation from construction activities are aligned with the assumptions and evaluation parameters used in the 2020 Acoustical Analysis Report), similar to the Proposed Project (see Section 2.9, Noise and Vibration).

Paleontological Resources

The Community Buffer Alternative would slightly reduce the area of disturbance by 15.4 acres compared to the Proposed Project. This approximately 2% reduction in graded area would not substantially reduce the paleontological resource impact relative to the Project. The Community Buffer Alternative would require substantially over 2,500 cubic yards of grading in areas of "high" and "moderate" paleontological resource and would therefore result in a potentially significant impact to paleontological resources (**Impact PR-1**) similar to the Project. This potential significant impact could be reduced to less than significant by implementing mitigation measure **M-PR-1** (Paleontological Resources Impact Mitigation Program (PRIMP) with monitoring), similar to the Proposed Project (see Section 2.10, Paleontological Resources).

Tribal Cultural Resources

When compared to the Proposed Project, Community Buffer Alternative would reduce grading impacts by 15.4 acres. This reduction in grading would reduce the potential impact to TCRs relative to the Project. However, the Community Buffer Alternative's approximately 2% reduction in graded area would not substantially reduce the potential tribal cultural resource impact relative to the Project. The Community Buffer Alternative would continue to result in potentially significant impacts to TCRs within 50 feet of the Project ADI or within resource-specific, predetermined buffers, and has the potential to affect undiscovered TCRs, including human remains and archaeological resources that may qualify as TCRs (**Impact TCR-1**). Thus, the Community Buffer Alternative would have similar tribal cultural resource impacts as the Project. As with the Proposed Project, the Community Buffer Alternative could mitigate these impacts to below a level of significance via **M-TCR-1** and **M-TCR-2** that require temporary fencing, and archaeological and tribal monitoring.

Wildfire

The majority of the Project site is located within a High FHSZ, with a western portion within a Moderate FHSZ and a small area as a Very High FHSZ (CAL FIRE 2007a), as detailed in Section 2.12, Wildfire. While potential wildfire impacts would be slightly reduced by maintaining a 300-foot buffer between development and adjacent residential uses within the community of Jacumba Hot Springs, the Community Buffer Alternative would also have potentially significant wildfire impacts similar to that of the Proposed Project. Potential impacts related to direct and cumulative operational-related wildfire risk (**Impact WF-1 and WF-CU-1**), construction-related wildfire risk (**Impact WF-2 and WF-CU-2**) and the installation or maintenance of associated infrastructure that may

exacerbate fire risk during construction and operation (**Impact WF-3**) would occur under this Alternative. Similar to the Project, the development under this alternative would be required to implement design and fire protection measures from a project-specific FPP (**M-WF-1**), as well as the risk reduction and daily fire prevention measures in a CFPP (**M-WF-2**). Also similar to the Project, the development under this alternative would be required to participate in a Fire Protection and Mitigation Agreement (**M-WF-3**) to ensure the development paid it fair share toward providing fire protection services and facilities. None-the-less, the Community Buffer Alternative would result in development within an area at risk from wildfires. Thus, the wildfire impacts of the Community Buffer Alternative would be similar but slightly less than that of the Proposed Project (see Section 3.12, Wildfire).

Other Resource Topics

Under the Community Buffer Alternative, impacts related to agricultural resources, energy, GHG emissions, land use and planning, parks and recreation, population and housing, public services, transportation, utilities and service systems would be less than significant and would be similar to the Proposed Project.

4.4.3 Summary of the Community Buffer Alternative Analysis

The Community Buffer Alternative would include a 300-foot buffer from adjacent private properties in the community of Jacumba Hot Springs, north of Old Highway 80. This buffer would reduce the area of impact by 15.4 acres compared with the Proposed Project. This alternative would reduce impacts to aesthetics **(Impacts AE-1, AE-2, AE-CU-1 and AE-CU-2**), air quality (**Impact AQ-1**), biological resources (**Impacts BI-V-2,** and **BI-W-2**), hydrology and water quality (**Impact HDY-1**), mineral resources (**Impact MR-1**) and noise (**Impacts NOI-1, NOI-2 and NOI-3**). Although these impacts would be lessened, they would remain potentially significant under the Community Buffer Alternative. All of the impacts listed above, except for **Impacts AE-1**, **AE-2, AE-CU-1, AE-CU-2** and **MR-1**, could be reduced to less than significant with implementation of mitigation measures. **Impacts AE-1**, **AE-2, AE-CU-1, AE-CU-2** and **MR-1** would remain significant and unavoidable, similar to the Project. The provision of a 300-foot buffer adjacent to Jacumba Hot Springs would not have a substantial effect to the remaining significant impacts of the Proposed Project, including cultural resources, geology, hazards and hazardous materials, hydrology and water quality, paleontological resources, and tribal cultural resources. Similar to the Project, with implementation of mitigation measure these impacts would be reduced to less than significant.

The Community Buffer Alternative would generally meet all project objectives, although not to the degree that the Proposed Project would. This alternative would generate 7.7 MW less than the Project, and therefore, it would not achieve Project objectives 1, 2 or 3, 5 or 7 to the extent of the Proposed Project.

4.5 Analysis of the Reduced Project Alternative

4.5.1 Reduced Project Description and Setting

The Reduced Project Alternative would have a reduced impact area relative to the Proposed Project. As shown in Figure 4-2, Reduced Project Alternative Site Plan, this alternative would not develop the portion of the Project site to the north of the SDG&E easement, which transects the Project site. The intent of this alternative is to reduce visual impacts to motorists traveling on the I-8 freeway and reduce the permanent loss of availability of mineral resources due to the biological open space easements required as mitigation. This alternative would also lessen other impacts as discussed below. Under the Reduce Project Alternative, the development footprint would be a total of 501 acres, which is a reduction of 142 acres compared to the Proposed Project. The decreased development footprint would reduce the number of PV modules that could be installed. This alternative would install 250,428 PV modules, which is 49,572 modules less than the Proposed Project. This reduction in PV modules would reduce the amount of energy generated by this alternative. The Reduced Project Alternative would generate 68 MW compared to the Proposed Project's generation of 90 MW, which is a reduction of 22 MW. The capacity of the battery energy storage system, including number of battery containers, would also likely be reduced under this alternative. The switchyard, substation, overhead and underground lines and other project components to the south of the transmission lines would be the same as the Proposed Project. The length of construction would be reduced under this Alternative, but the daily construction would remain the same as the Proposed Project.

4.5.2 Comparison of the Effects of Reduced Project Alternative to the Proposed Project

Aesthetics

Under the Reduced Project Alternative, no construction would occur in the area between the SDG&E easement and I-8. This area to be avoided totals approximately 142 acres. This reduction represents a reduction of 22% of the Proposed Project development footprint, which would substantially reduce the scale and acreage of the solar facility. Thus, the impacts to visual character and quality would be lessened. Nonetheless, the Reduced Project Alternative would continue to result in a potential significant impact to visual quality and the character. Thus, **Impacts AE-1** and **AE-2** would be lessened but would remain potentially significant.

The visual impacts of the Reduced Project Alternative from Key Views 3, 4, 5, and 6 (see Figure 2.1.8A for location of key views) would be the same view as the Project since the distant views of the northern area of the Project site is either not visible or would be blocked by slatted fencing and PV panels (see Figures 2.1-11 through 2.1-14). Thus, **Impact AE-4** (from Old Highway 80)

and **Impact AE-5** (from Jacumba Community Park) would be the same as the Project and would be potentially significant.

The Reduced Project Alternative reduction of the development footprint by 142 acres in the northern portion of the Project site would reduce impacts to Key Views 1, 2, 7, 8 and 9 (see EIR Figure 2.1-8A for locations of these key views). These visual impacts from this alternative from these key views are discussed below.

The change in Key View relative to the Project would be the greatest from Key View 1 from I-8, as the Project's PV modules in the northern area are a prominent feature in that view. I-8 is an eligible state scenic highway, and the Reduced Project Alternative was specifically designed to reduce the visual impacts as viewed from I-8. The Reduced Project Alternative would eliminate all the PV modules, battery storage containers, and fencing in the motorists' I-8 foreground view. This Reduced Project Alternative development reduction would substantially reduce **Impact AE-3** relative to the Project, as it would provide a substantial visual buffer and would retain the area as open unencumbered land in the foreground. However, the distant view from I-8 under this alternative would still include a dark mass of PV modules over a substantial area (501 acres). Thus, the Reduced Project Alternative would result in a potentially significant impact to the I-8 view similar to the Project, this impact would be significant and unavoidable.

Key View 2 provides a view from the northeast looking towards the Project site for motorists along Carrizo Gorge Road (Figure 2.1-10). This view includes the solar facility in the midground. Due to the topography and angle of the view, the development of the Reduced Project Alternative would not be prominent relative to the mountains and other features visible. This roadway is also not designated as scenic. Similar to the Project, the Reduced Project Alternative would have a less than significant impact to views along this Carrizo Gorge Road.

Key View 7 represents the view from State Park Lands (Figure 2.1-15) to the northwest of the Project site. Although this key view does not include the northern area of the site where a reduction in development would occur under the Reduced Project Alternative, visual impacts from the State Park Lands looking east or northeast would be reduced by this alternative. From locations within State Park Lands to the north of Key View 7, views primarily consist of the northern area of the site and the elimination of development in that area would substantially reduce prominence of the development and the associated the visual impacts. Thus, the Reduced Project Alternative would substantially reduce impacts to views from State Park Lands (**Impact AE-6**) relative to the Project. However, considering the view impacts from certain State Park Land locations such as Key View 7 would remain, the Reduced Project Alternative impact to State Park Lands would remain significant. This impact would remain significant and unavoidable, similar to the Project.

Round Mountain is located adjacent to the northern area of the Project site. The eastern portion of Round Mountain is within the Project site, the western portion is federal land managed by the Bureau of Land Management. As such, the Reduced Project Alternative reduction of development within the northern area would reduce the visual impact of the development relative to the Project. Thus, the Reduced Project Alternative would substantially reduce impacts to views from Round Mountain (**Impact AE-7**) relative to the Project. However, this impact would remain significant and unavoidable, similar to the Proposed Project.

The Airport Mesa viewpoint is located to the southeast of the Project site and is represented by Figure 2.1-16. From this elevated viewpoint, the northern area of the Project is visible over the topographic features located adjacent to the site. The reduction of development in the northern area of the site would reduce the impact to this view relative to the Project considering the expanse of dark PV modules would be noticeably reduced from this vantage point. Thus, the Reduced Project Alternative would substantially reduce impacts to views from Airport Mesa (**Impact AE-8**) relative to the Project. However, under the Reduced Project Alternative, the impact to the Airport Mesa views would remain significant and unavoidable, similar to the Project.

The Table Mountain viewpoint is located to the northeast of the Project site and is represented by Figure 2.1-17. From this elevated viewpoint, the northern area of the Project is visible but is partially obscured from topography. None-the-less, the reduction of development in the northern area of the site would still reduce the impact to this view relative to the Project considering the dark PV modules would be noticeably reduced from this vantage point. Thus, the Reduced Project Alternative would substantially reduce impacts to views from Table Mountain (**Impact AE-9**) relative to the Project. However, under the Reduced Project Alternative impact to the Table Mountain views would remain significant and unavoidable, similar to the Project.

In summary, the Reduced Project Alternative would lessen aesthetic **Impacts AE-1, AE-2, AE-3, AE-6, AE-7, AE-8,** and **AE-9** but these impacts would remain potentially significant. **Impacts AE-CU-1, AE-CU-2, AE-4,** and **AE-5** would be the same under the Reduced Project Alternative as the Project. With the implementation of **M-AE-1 - M-AE-6, t**he Reduced Project Alternative would include softer colors for buildings, landscaping buffers, buffers from the community, and a slatted screening fence. Similar to the Proposed Project, the impacts from light and glare would remain less significant under this alternative.

Air Quality

The Reduced Project Alternative would require less construction activities than the Proposed Project, which would reduce air quality emissions during construction. The construction diesel exhaust emissions from the Proposed Project was determined to result in a cancer risk on site above the 1 in 1 million threshold without application of T-BACT (**Impact AQ-1**). The reduction

of the development footprint by about 142 acres (22%) under the Reduced Project Alternative would reduce diesel emissions, as the construction efforts would be reduced. Given that the Project cancer risk from construction exhaust was 2.93 in a million and was well over the 1 in a million County Guidelines threshold for the Proposed Project, this reduction in the development footprint would not reduce this impact to below a level of significance. Overall, the Reduced Project Alternative would reduce the cancer risk relative to the Project, but the impact would remain potentially significant. The Reduced Project Alternative could implement **M-AQ-1** to reduce this TAC impact to less than significant, similar to the Project.

Proposed Project emissions of NO_x, PM_{10}, and $PM_{2.5}$ would exceed the daily emissions threshold of significance (**Impact AQ-CU-1**). The Reduced Project Alternative would reduce the development footprint by 142 acres. While this reduction would reduce overall emissions, the criteria pollutant emission thresholds are based on a daily emission rate. The duration of construction may be slightly reduced under this Reduced Project Alternative relative to the Proposed Project, but the per day activities are expected to be similar to the Project. Thus, it is expected that the Reduced Project Alternative's impacts related to daily criteria pollutant emissions would be similar to the Project and would exceed the daily emissions threshold of significance for NO_x, PM_{10}, and $PM_{2.5}$. The Reduced Project Alterative could implement **M-AQ-1** and **M-AQ-2** to reduce **Impact AQ-CUM-1** to less than significant, similar to the Project (see Section 2.2, Air Quality).

Biological Resources

The Reduced Project Alternative would include a reduction in impact area of 141.81 acres when compared to the Proposed Project. Of that 141.8 acres, disturbed habitat and developed lands account for 16.8 acres; neither of which require mitigation per the County of San Diego guidelines. The remaining 125 acres includes 32 acres of desert saltbrush scrub, 39.6 acres of Sonoran mixed woody and succulent scrub and 53.4 acres of fallow agriculture, all of which require mitigation. Desert saltbrush scrub requires mitigation at a 2:1 ratio (64 acres). Sonoran mixed woody and succulent scrub require a 1:1 mitigation ratio (39.6 acres) and fallow agriculture is mitigated at a 0.5:1 ration (26.7 acres). Therefore, total mitigation requirements (**M-BI-3**) under the Reduced Project Alternative would be reduced by 130.3 acres. This avoidance would reduce permanent direct impacts to sensitive vegetation communities (**Impact BI-V-2**), however, the impact would remain potentially significant under the Reduced Project Alternative.

The Reduced Project Alternative would also reduce permanent direct impacts to loggerhead shrike, California horned lark, San Diegan tiger whiptail, mule deer, brewer's sparrow, and San Diego desert woodrat that are considered special status wildlife (**Impacts BI-W-2**). The avoidance of this area would also reduce impacts to raptor foraging (**Impact BI-W-2**). Areas containing pygmy lotus and sticky geraea, which are special-status plants, would also be avoided under the Reduced Project Alternative (**Impact BI-SP-2**). Considering the substantial reduction

in the development footprint and that the avoided area would be located adjacent to primarily undeveloped areas, the Reduced Project Alterative would lessen indirect impacts to special status plants (**Impacts BI-SP-1, BI-SP-3,** and **BI-SP-4)**, special status wildlife **(Impacts BI-WI-1, BI-W-2, BI-W-5,** and **BI-W-6)**, sensitive vegetation communities (**Impacts BI-V-1, BI-V-3,** and **BI-V-4**) and jurisdictional resources (**Impacts BI-JAR-1** to **BI-JAR-3**) during construction and operations. In addition, a greater wildlife core and east-west linkage area would not be developed and **Impacts BI-WLC-1** through **BI-WLC-3** would be reduced.

All other direct impacts of the Reduced Project Alternative would be similar to the Proposed Project, including potential impacts to the State-listed tricolored blackbird (**Impact BI-W-2**), other special status plants (**Impacts BI-SP-1** to **BI-SP-4**), other special status wildlife (**Impacts BI-W-1** and **BI-W-2, BI-W-5, BI-W-6**), nesting birds (**Impacts BI-W-3**), bats (**Impacts BI-W-4**), and burrowing owls (**Impact W-2**).

Overall, the Reduced Project Alternative would substantially reduce biological resource impacts relative to the Project, but the impacts would remain potentially significant. The Reduced Project Alternative could implement mitigation measures **M-BI-1** through **M-BI-12** that include biological monitoring; habitat preservation; construction-related indirect or temporary avoidance measures; resource management plan; nesting bird and bat surveys; bat roost avoidance; prevention of invasive plant species; O&M guidelines; and noise reduction measures to reduce impacts to less than significant, similar to the Project (see Section 2.3, Biological Resources). .

Cultural Resources

Under the Reduced Project Alternative, the impact area would be reduced by 142-acres in the northern area of the Project site. The Reduced Project Alternative would reduce potential impacts to undiscovered cultural resources and undiscovered human remains considering the impact area would be reduced. Given this alternative would reduce impacts by 142 acres, or 22 percent relative to the project, this reduction in potential impacts to undiscovered cultural resources would be substantial. Thus, the Reduced Project Alternative's impacts to undiscovered cultural resources (**Impact CR-1**) and undiscovered human remains (**Impact CR-3**) would be less than the Project. None-the-less, these impacts would remain potentially significant.

The Reduced Project Alternative would avoid impacts to CA-SDI-7054, CA-SDI-11675, CA-SDI-11676, CA-SDI-11684, CA-SDI-19070, CA-SDI-19904 to CA-SDI-19910, and CA-SDI-22733 as well as P-37-38609, P-37-038610, P-37-038611, P-37-038612, P-37-038613, P-37-038614, P-37-038615, P-37-038616, and P-37-038624. Overall, the Reduced Project Alternative would directly impact 15 archaeological sites, which is 13 less than the Proposed Project. Thus, this alternative would have substantially less impacts to County important sites than the

Proposed Project. Nonetheless, the impacts to the 15 County-important archaeological sites would be potentially significant.

The Reduced Project Alternative could implement mitigation measures **M-CR-1** through **M-CR-4** that require temporary fencing, archaeological monitoring, Cultural Resources Treatment Agreement and Preservation Plan, and Long-term Preservation of Resources to reduce **Impacts CR-1** to **CR-4** to less than significant, similar to the Project (see Section 2.4, Cultural Resources).

Geology, Soils, and Seismicity

The Reduced Project Alternative would reduce the impact area by 142 acres in the northern area of the Project site. As the impact area would be reduced substantially by 22% , the Reduced Project Alternative would substantially reduce the Project's significant geologic impacts related to potential static settlement, liquefaction, possible lateral spread and expansive soils during construction and operation (**Impacts GEO-1** and **GEO-2**). However, the Reduced Project Alternative's geologic impacts would remain potentially significant. These impacts could be reduced through implementation of mitigation measure **M-GEO-1** (final site-specific geotechnical report that demonstrate compliance with the California Building Code requirements) to less than significant, similar to the Project (see Section 2.5, Geology, Soils and Seismicity).

Hazards and Hazardous Waste

While potential wildfire hazard impacts would be reduced because the development footprint would be reduced by 142 acres and the construction period would be reduced, this alternative would continue to have potentially significant wildfire hazard impacts similar to that of the Proposed Project. Potential impacts related to operational-related wildfire hazards (**Impact HAZ-1**) and construction-related wildfire hazards (**Impact HAZ-2)** would still occur under this Alternative. The Reduced Project Alternative would be required to implement the design and fire protection measures in a project-specific FPP (**M-WF-1**), as well as the risk reduction and daily fire prevention measures in a CFPP (**M-WF-2**). Also, similar to the Proposed Project, the development under this alternative would be required to participate in a Fire Protection and Mitigation Agreement (**M-WF-3**) to ensure the development paid its fair share toward providing fire protection services and facilities. Thus, hazards and hazardous materials impacts due to the Reduced Project Alternative would be less than significant with implementation of mitigation, similar to the Proposed Project. In addition, the Reduced Project Alternative would slightly reduce the Project's significant cumulative impacts to interference with emergency response and wildland fire hazards (**Impacts HAZ-CU-1** and **HAZ-CU-2**). These impacts could be reduced below a level of significance with mitigation such as **M-WF-1, M-WF-2** and **M-WF-3** similar to the Proposed Project. Thus, the wildfire hazard impacts of the Reduced Project Alternative would be similar but slightly less than that of the Proposed Project (see Section 2.6, Hazards and Hazardous Materials).

Hydrology and Water Quality

The Reduced Project Alternative would reduce the impact area by 142 acres. Similar to the Proposed Project, potentially significant hydrology and water quality impacts associated with potential alteration of drainage patterns and flood hazards due to the perimeter fence would occur (**Impact HYD-1**). This impact would be reduced to below a level of significance with implementation of mitigation measure **M-HYD-1** that requires a perimeter fencing and layout plan that avoids the blockage and/or redirection of storm flows (see Section 2.7, Hydrology and Water Quality).

Mineral Resources

The Proposed Project would result in a significant and unavoidable impact to mineral resources (**Impact MR-1**). This impact is a result of the biological open space easement (188 acres) which is required as mitigation for impacts to biological resources (see Section 2.8, Mineral Resources). The Reduced Project Alternative would have a reduced impact area relative to the Proposed Project, as this alternative would not develop the portion of the Project site to the north of the SDG&E easement. Under the Reduced Project Alternative, the development footprint would be a total of 501 acres, which is a reduction of impact area of 141.81 acres when compared to the Proposed Project. Of that 141.8 acres, disturbed habitat and developed lands account for 16.8 acres; neither of which require mitigation per the County of San Diego guidelines. The remaining 125 acres includes 32 acres of desert saltbrush scrub, 39.6 acres of Sonoran mixed woody and succulent scrub and 53.4 acres of fallow agriculture, all of which require mitigation. Desert saltbrush scrub requires mitigation at a 2:1 ratio (64 acres). Sonoran mixed woody and succulent scrub require a 1:1 mitigation ratio (39.6 acres) and fallow agriculture is mitigated at a 0.5:1 ration (26.7 acres). Therefore, total mitigation requirements for habitat preservation under the Reduced Project Alternative would be reduced by 130.3 acres. Therefore, the total open space easement mitigation requirement for this alternative would be 304.7 acres. For purposes of this analysis, it is conservatively assumed that the 130.3 acres of land that would not be placed in a biological open space easement would be located within the valley portion of the Project site and overlies the area of the valley that contains mineral resources (i.e., it is assumed that this alternative would reduce the impacts to mineral resources to the maximum extent possible). However, notably, this will likely not be the case as the valley portion of the Project site to be preserved by the open space easements contains significant biological value and acts as a wildlife corridor.

This reduction in biological open space easement requirements would reduce the amount of permanent loss of availability of mineral resources, as compared to the Proposed Project. It is conservatively estimated that the 130.3 acres of land that would not be placed in a biological open space easement under this alternative would have underlying mineral resources. Thus, under this alternative 57.7 acres of biological open space easements would have underlying mineral resources.

The estimated acreage of biological open easement with underlying mineral resources under this alternative is approximately 31% of the acreage of mineral resources loss due to biological open space easements (188 acres) for the Proposed Project. Assuming the same price of $20.00 per ton, a density of 0.055 tons per cubic foot and a waste factor of approximately 40 percent, the value of material would be roughly $66,985,418 which would exceed the threshold ($12,500,000) for the County's definition of a significant impact. Thus, the value of the mineral resources that would be permanently unavailable as a result of the Reduce Project Alternative would still exceed the County's minimum value threshold. As no feasible mitigation exists to reduce impacts to below a level of significance, impacts to mineral resources caused by the Reduced Project Alternative would remain significant and unavoidable under this alternative.

Noise

The Reduced Project Alternative would reduce the development footprint in the northern portion of the site by 142 acres; however, the development footprint would be the same as the Project adjacent to the community of Jacumba Hot Springs. Thus, the construction and operational noise impacts under the Reduced Project Alternative would be the same as the Project, including potential significant impacts associated with operational panel cleaning noise (**Impact NOI-1 and NOI-2**) and construction-related noise (**Impact NOI-3**). The Reduced Project Alternative could implement mitigation measures **M-NOI-1** (requires an updated Acoustical Analysis Report to ensure noise-producing stationary equipment would be compliant with County noise standards), **M-NOI-2** (PV Panel Washing Plan), and **M-NOI-3** (Construction Noise Management Plan) to reduce these impacts to less than significant, similar to the Project (see Section 2.9, Noise and Vibration).

Paleontological Resources

The Reduced Project Alternative would reduce the impact area by 142 acres, which would reduce the potential impacts to paleontological resources as a result of grading. As shown on Figure 2.7-1, Project Site Paleontological Resource Potential, the avoidance of the northern area would reduce impacts to areas designated as moderate to low sensitivity for paleontological resources. Considering a reduction would occur to the moderate sensitivity area, the Reduced Project Alternative reduction would reduce the paleontological resource impact relative to the Project (**Impact PR-1**). Nonetheless, the Reduced Project Alternative would require substantially over 2,500 cubic yards of grading in areas of "high" paleontological resource and would therefore result in a potentially significant impact to paleontological resources. The Reduced Project Alternative could implement mitigation measure **M-PR-1** (Paleontological Resources Impact Mitigation Program (PRIMP) with monitoring) to reduce the impact to less than significant, similar to the Project (see Section 2.10, Paleontological Resources).

Tribal Cultural Resources

The Reduced Project Alternative would reduce grading by 142 acres compared to the Project. This reduction in grading would reduce the potential impact to Tribal Cultural Resources (**Impact TCR-1**) relative to the Proposed Project. None-the-less, the Reduced Project Alternative would result in potentially significant impacts to Tribal Cultural Resources within 50 feet of the Project ADI or within resource-specific, predetermined buffers, and the alternative has the potential to affect undiscovered TCRs, including human remains. The Reduced Project Alternative could implement mitigation measures **M-TCR-1** (temporary fencing), **M-TCR-2** (archaeological and tribal monitoring) and **M-TCR-3** (long-term preservation of resources) to reduce the impacts to less than significant, similar to the Proposed Project (see Section 2.11, Tribal Cultural Resources).

Wildfire

The majority of the Project site is located within a FHSZ, with a western portion within a Moderate FHSZ and a small area as a Very High FHSZ (CAL FIRE 2007a). While potential wildfire impacts would be reduced because the development footprint would be reduced by 142 acres, this alternative would have potentially significant wildfire impacts similar to that of the Proposed Project. Potential impacts related to operational-related wildfire risk (**Impact WF-1**), construction-related wildfire risk (**Impact WF-2**) and the installation or maintenance of associated infrastructure that may exacerbate fire risk during construction and operation (**Impact WF-3**) would still occur under this Alternative. The Reduced Project Alternative would be required to implement the design and fire protection measures in a project-specific FPP (**M-WF-1**), as well as the risk reduction and daily fire prevention measures of a project-specific CFPP (**M-WF-2**), similar to the Proposed Project. Also similar to the Project, the development under this alternative would be required to participate in a Fire Protection and Mitigation Agreement (**M-WF-3**) to ensure the development paid it fair share toward providing fire protection services and facilities. Thus, wildfire impacts due to the Reduced Project Alternative would be less than significant, with implementation of mitigation, similar to the Proposed Project (see Section 2.12, Wildfire).

Other Resource Topics

The Reduced Project Alternative's impacts related to agricultural resources, energy, GHG emissions, land use and planning, parks and recreation, population and housing, public services, transportation, and utilities and service systems would be less than significant, similar to the Proposed Project.

4.5.3 Summary of the Reduced Project Alternative Analysis

The Reduced Project Alternative would avoid the area to the north of the SDG&E easement. The reduction of the development footprint by 142 acres would reduce impacts to aesthetics **(Impacts AE-1, AE-2, AE-3,** and **AE-6 through AE-9**), air quality (**Impact AQ-1**), biological resources (**BI-V-2, BI-W-2, BI-SP-2, BI-W-1, BI-W-2, BI-W-5, BI-W-6, BI-V-1, BI-V-3, BI-V-4, BI-JAR-1, BI-JAR-2, BI-JAR-3, BI-WLC-1 BI-WLC-2**, and **BI-WLC-3**), cultural resources (**Impacts CR-1** and **CR-2**), geology (**GEO-1** and **GEO-2**), hazards and hazardous materials (**Impacts HAZ-1** and **HAZ-2**), hydrology and water quality (**Impact HYD-1**), mineral resources (**Impact MR-1**), paleontological resources (**Impact PR-1**), tribal cultural resources (**Impact TCR-1**), and wildfire (**Impacts WF-1, WF-2 and WF-3**). These impacts could be reduced to less than significant with implementation of mitigation measures, except Impacts **AE-4, AE-5**, and **MR-1** which would remain significant and unavoidable.

This alternative would generally meet all project objectives, although not to the degree that the Proposed Project would. The Reduced Project Alternative would result in approximately 22% less renewable energy generation and, therefore, it would not achieve Project objectives 1, 2 or 3, 5 or 7 to the extent of the Proposed Project.

4.6 Summary of Alternatives

A summary of impacts of the alternatives compared to the Proposed Project by resource topic is included in Table 4-1, pursuant to CEQA Guidelines Section 15126.6(D).

4.7 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(a) states that an EIR shall describe a range of reasonable alternatives. As evaluated in Chapter 2 of this EIR, the significant impacts of the Proposed Project include the following: aesthetics; air quality; biological resources; cultural resources; geology, soils, and seismicity; hazards and hazardous materials; hydrology and water quality; mineral resources; noise; paleontological resources; tribal cultural resources; and wildfire. The No Development No Project Alternative would avoid impacts to all of these topic areas, and therefore would be the environmentally superior alternative. However, the No Development No Project Alternative does not meet any of the project objectives.

Additionally, CEQA Guidelines Section 15126.6(e)(2) states that if the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives. The Reduced Project Alternative would be the environmentally superior alternative, as it would substantially reduce the severity of aesthetic impacts (**Impacts AE-1, AE-2, AE-3, and AE-6 to AE-9**), air quality (**Impact AQ-1**), as well as all

significant biological, cultural, geologic, hazards and hazardous materials, hydrology and water quality, mineral resources, paleontological, and tribal cultural resource impacts (Table 4-1).

INTENTIONALLY LEFT BLANK

Table 4-1
Summary of Alternatives to the Proposed Project

Issue Areas	Proposed Project	Alternatives			
		No Project			
		No Development	*Buildout*	*Community Buffer*	*Reduced Project*
Impact AE-1: Impact to Jacumba existing visual character and/or quality	SU	▼	=	▼	▼
Impact AE-2: Impact to visual character of Jacumba Hot Springs	SU	▼	▼	▼	▼
Impact AE-3: I-8 Long distance view changes to this eligible state scenic highway viewpoint due to proposed project	SU	▼	▼	=	▼
Impact AE-4: Old Highway 80 – Long distance view blockage and character change from this County scenic highway system viewpoint due to proposed solar and fencing	SU	▼	▲	=	=
Impact AE-5: Jacumba Community Park – Long distance view blockage and character change from this County Park due to proposed solar and fencing	SU	▼	▲	=	=
Impact AE-6: Anza-Borrego Desert State Park Lands and Carrizo Gorge Wilderness - Long distance view changes from State Parks lands due to proposed solar	SU	▼	▼	=	▼
Impact AE-7: Round Mountain – Character change and view interruption from this recreational resource viewpoint due to proposed solar	SU	▼	▼	=	▼
Impact AE-8: Airport Mesa - Long distance view changes at this recreational resource viewpoint due to proposed solar	SU	▼	▼	=	▼
Impact AE-9: Table Mountain area – Long distance view changes at this recreational resource viewpoint due to proposed solar	SU	▼	▼	=	▼

Table 4-1
Summary of Alternatives to the Proposed Project

Issue Areas	Proposed Project	Alternatives			
		No Project			
		No Development	*Buildout*	*Community Buffer*	*Reduced Project*
Impact AE-10: Glare impact to roadways from proposed project	LS	▼	▲	=	▼
Impact AE-CU-1 **Cumulative** Impact on valued visual character or image of neighborhoods, communities, or localized areas.	SU	▼	=	▼	▼
Impact AE-CU-2 Cumulative impacts to panoramic vista available from elevated vantage point in the Airport Mesa and Table Mountain Recreational Management Zones.	SU	▼	▼	=	▼
Impact AQ-1: Construction-related cancer risk from diesel exhaust	SM	▼	▲	▼	▼
Impact AQ-CUM-1: Construction-related emissions of No_x, PM_{10} and $PM_{2.5}$	SM	▼	▲	=	=
Impact BI-SP-1: Temporary direct impact to special-status plants	SM	▼	▲	=	▼
Impact BI-SP-2: Permanent direct impact to special-status plants	SM	▼	▲	=	▼
Impact BI-SP-3: Construction-related temporary indirect impacts to special-status plants	SM	▼	▲	=	▼
Impact BI-SP-4: Operational permanent indirect impacts to special-status plants	SM	▼	▲	=	▼
Impact BI-W-1: Temporary direct impact to special-status wildlife	SM	▼	▲	=	▼
Impact BI-W-2: Permanent direct impact to special-status wildlife (including tricolored blackbird, burrowing owl and raptor foraging habitat)	SM	▼	▲	▼	▼

Table 4-1
Summary of Alternatives to the Proposed Project

Issue Areas	Proposed Project	Alternatives			
		No Project			
		No Development	*Buildout*	*Community Buffer*	*Reduced Project*
Impact BI-W-3: Permanent direct impact to special-status wildlife (sensitive bird nesting)	SM	▼	▲	=	=
Impact BI-W-4: Permanent direct impact to Special-status wildlife (bats)	SM	▼	▲	=	=
Impact BI-W-5: Construction-related temporary indirect impacts to special-status wildlife (including sensitive bird nesting)	SM	▼	▲	=	▼
Impact BI-W-6: Operational permanent indirect impacts to special-status wildlife	SM	▼	▲	=	▼
Impact BI-WLC-1: Temporary direct impact to wildlife movement	SM	▼	▲	=	▼
Impact BI-WLC-2: Permanent direct impact to wildlife movement (Core wildlife area)	SM	▼	▲	=	▼
Impact BI-WLC-3: Temporary indirect impact to wildlife movement	SM	▼	▲	=	▼
Impact BI-V-1: Temporary direct riparian habitat or sensitive vegetation communities	LS	▼	▲	=	▼
Impact BI-V-2: Permanent direct riparian habitat or sensitive vegetation communities	SM	▼	▲	▼	▼
Impact BI-V-4: Permanent indirect riparian habitat or sensitive vegetation communities	SM	▼	▲	=	▼
Impact BI-JAR-1: Temporary direct Jurisdictional resources	SM	▼	▲	=	▼
Impact BI-JAR-2: Temporary indirect Jurisdictional resources	LS	=	▲	=	▼
Impact BI-JAR-3: Temporary indirect impact to jurisdictional resources	LS	▲	▲	▲	▼

Table 4-1
Summary of Alternatives to the Proposed Project

Issue Areas	Proposed Project	Alternatives			
		No Project			
		No Development	*Buildout*	*Community Buffer*	*Reduced Project*
Impact CR-1: Construction and Decommissioning-related impacts to undiscovered cultural resources on-site or known cultural resources within 50 feet of the Project ADI	SM	▼	▲	=	▼
Impact CUL-2 Construction-related impacts to undiscovered human remains	SM	▼	▲	=	▼
Impact GEO-1: Ground failure due to liquefaction, seismically induced settlements, and/or lateral ground spread that could result in the collapse of a structure	SM	▼	▲	=	▼
Impact GEO-2: Expansive soils have potential to impact development	SM	▼	▲	=	▼
Impact HAZ-1: Operational-related impacts that could exacerbate wildfire risks and thereby expose project occupants to risk of loss, injury or death involving wildland fires	SM	▼	▲	=	▼
Impact HAZ-2: Construction-related impacts exposing project occupants to potential risk of loss, injury or death involving wildland fires	SM	▼	▲	=	▼
Impact HAZ-CU-1 Cumulative impacts to interference with emergency response	SM	▼	▲	=	▼
Impact HAZ-CU-2 Cumulative impacts to Wildland Fire Hazards	SM	▼	▲	=	▼

Table 4-1
Summary of Alternatives to the Proposed Project

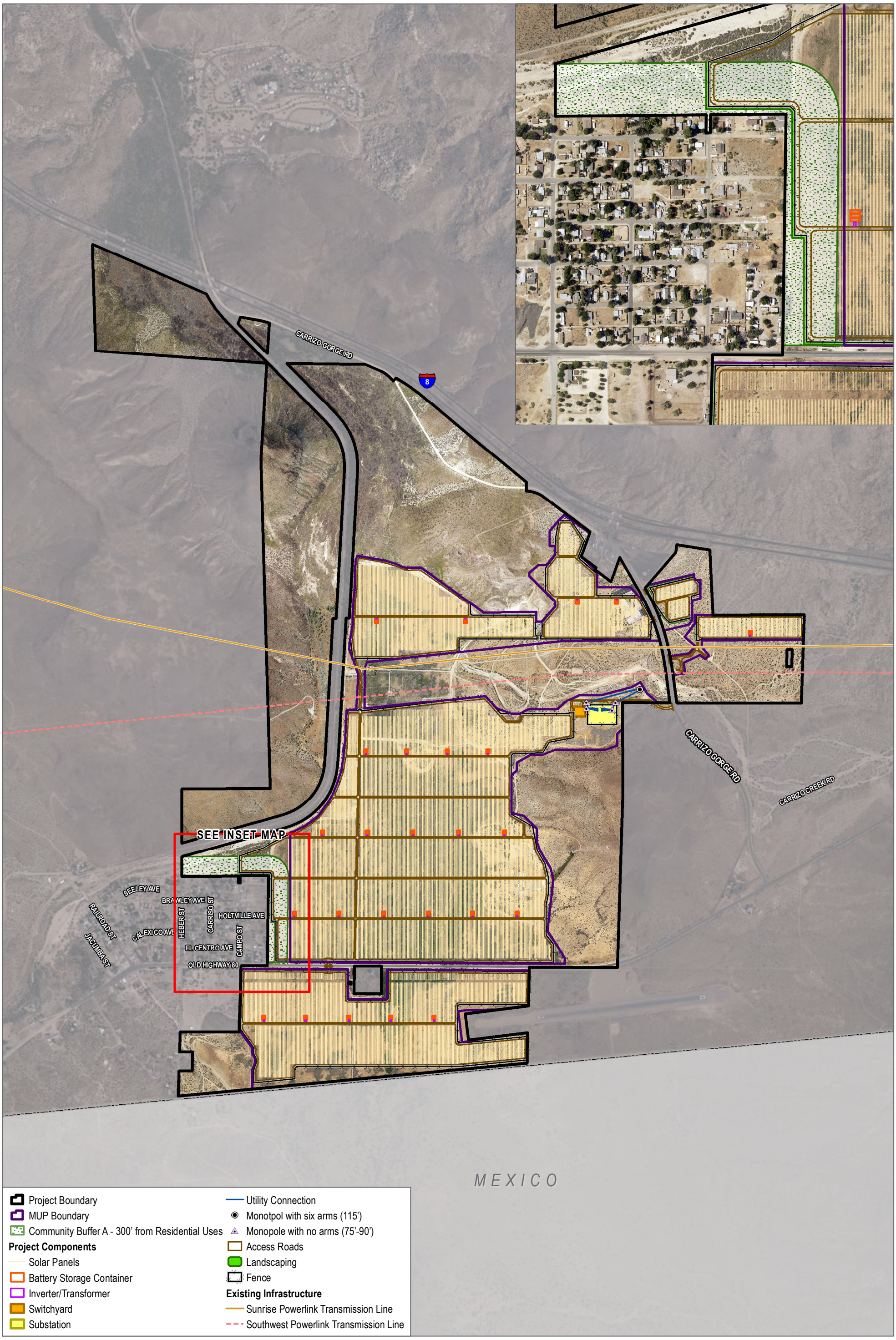
Issue Areas	Proposed Project	Alternatives			
		No Project			
		No Development	*Buildout*	*Community Buffer*	*Reduced Project*
Impact HYD-1: Impacts resulting from implementation of the Proposed Project associated with potential alteration of drainage patterns and flood hazards due to the perimeter fence, during construction and operation	SM	▼	▲	=	=
Impact MR-1 The Proposed Project is an interim use and would not result in the permanent loss of availability of a known mineral resource that is minable, processable, and marketable under the technologic and economic conditions that exist at present or which can be estimated to exist in the next 50 years and is valued at more than $12,500,000. However, MM BI-3, Habitat Preservation, a mitigation measure implemented to reduce the Proposed Project's impacts to biological resources, will cause a potentially significant impact with respect to the permanent loss of availability of a known mineral resource that is minable, processable, and marketable under the technologic and economic conditions that exist at present or which can be estimated to exist in the next 50 years and is valued at more than $12,500,000.	SU	▼	▲	▼	▼
Impact NOI-1: Operational stationary equipment noise	SM	▼	▲	▼	=
Impact NOI-2: Operational Mobile Equipment noise	SM	▼	▲	▼	=
Impact NOI-3: Construction-related noise	LS	▼	▲	▼	=
Impact PR-1: Construction-related impact to	SM	▼	▲	=	▼

Table 4-1
Summary of Alternatives to the Proposed Project

Issue Areas	Proposed Project	Alternatives			
		No Project			
		No Development	*Buildout*	*Community Buffer*	*Reduced Project*
paleontological resources					
Impact TCR-1: Construction-related impacts to tribal cultural resources	SM	▼	▲	=	▼
Impact WF-1 Operational-related impacts to wildfire risk	SM	▼	▲	=	▼
Impact WF-2 Construction-related impacts to wildfire risk	SM	▼	▲	=	▼
Impact WF-3 Infrastructure contribution to increased wildfire risk	SM	▼	▲	=	▼
Impact WF-CU-1 Cumulative Impact to Emergency Response and emergency evacuation plan	SM	▼	▲	=	▼
Impact WF-CU-2 Cumulative Impact to wildfire risk	SM	▼	▲	=	▼
Impact WF-CU-3 Cumulative Infrastructure Contribution to Increased Wildfire Risk	SM	▼	▲	=	▼

▲ Alternative is likely to result in greater impacts to issue when compared to Proposed Project.
= Alternative is likely to result in similar impacts to issue when compared to Proposed Project.
▼ Alternative is likely to result in reduced impacts to issue when compared to Proposed Project.

LS = less than significant without mitigation; SM = less than significant with mitigation measures; SU = potentially significant and unavoidable impact.



SOURCE: Kimley-Horn 2020; SANGIS 2017, 2020

DUDEK

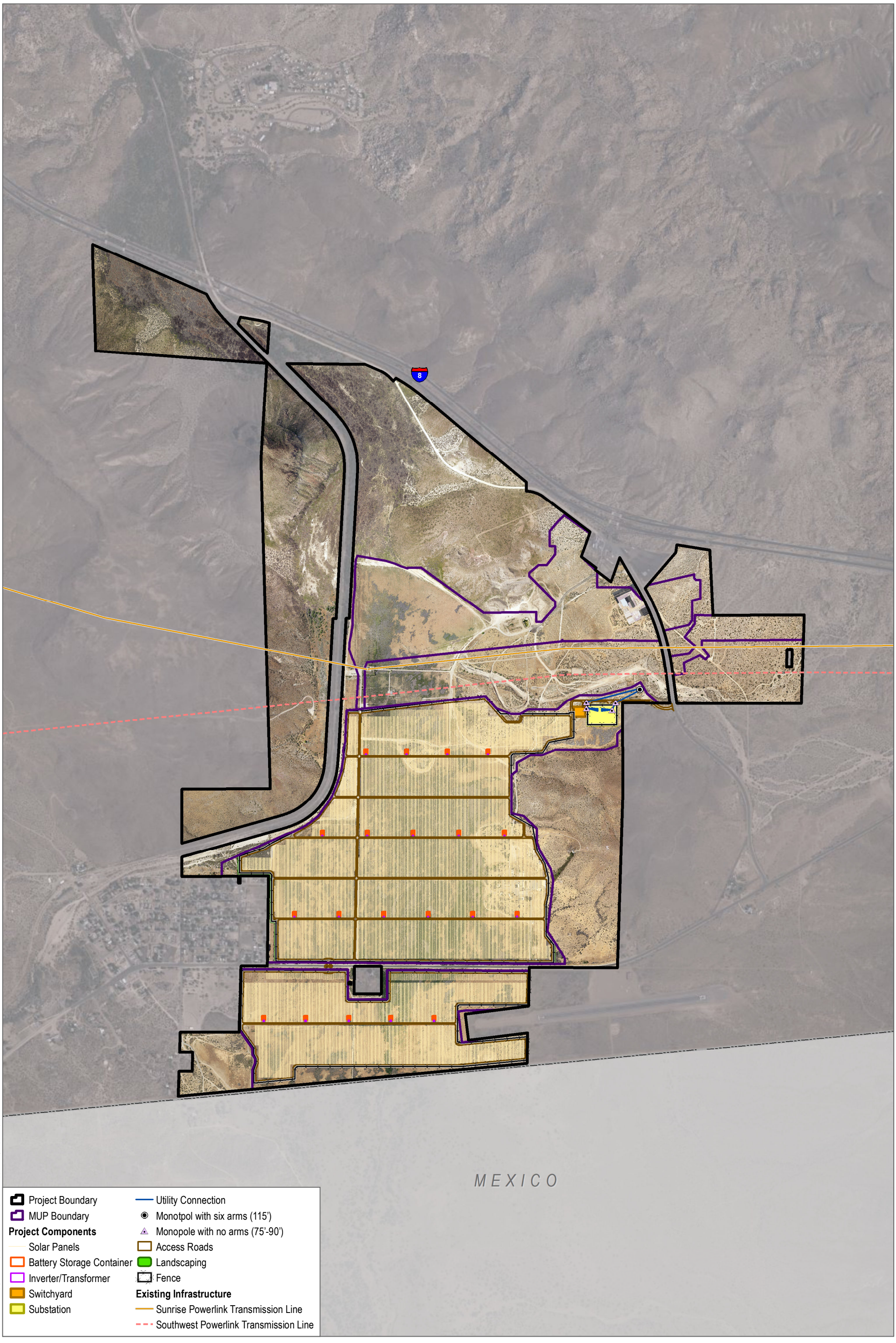
0 500 1,000 Feet

FIGURE 4-1

Community Buffer Alternative

JVR Energy Park Project

INTENTIONALLY LEFT BLANK



SOURCE: Kimley-Horn 2020; SANGIS 2017, 2020

DUDEK

0 500 1,000 Feet

FIGURE 4-2

Reduced Project Alternative

JVR Energy Park Project

INTENTIONALLY LEFT BLANK