## 6 Effects Found Not Significant

In accordance with Section 15128 of the CEQA Guidelines, an EIR must contain a statement briefly indicating the reasons that various potential significant effects of a project were determined not to be significant. Based on the Initial Study and Notice of Preparation prepared for the proposed project (Appendix A of this EIR), Imperial County has determined that the proposed project would not have the potential to cause significant adverse effects associated with the topics identified below. Therefore, these topics are not addressed in this EIR; however, the rationale for eliminating these topics is briefly discussed below.

## 6.1 Agriculture and Forestry Resources

#### 6.1.1 Forestry Resources

No portion of the project site or the immediate vicinity is zoned or designated as forest lands, timberlands, or timberland production. As such, the proposed project would not result in a conflict with existing zoning or cause the need for a zone change specifically related to forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)). Therefore, implementation of the proposed project would not impact forestry resources.

## 6.2 Energy

Information for this section is summarized from the *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis* prepared for the project by Vista Environmental. This report is included in Appendix C of this EIR.

The proposed project would impact energy resources during construction and operation. Energy resources that would be potentially impacted include electricity, and petroleum-based fuel supplies and distribution systems. The proposed project would not utilize any natural gas during either construction or operation of the proposed project, and no further analysis of natural gas is provided in this analysis.

The following discussion calculates the potential energy consumption associated with the construction and operation of the proposed project and analyzes if any energy utilized by the proposed project is wasteful, inefficient, or unnecessary consumption of energy resources.

### 6.2.1 Construction Energy

The construction activities for the proposed project are anticipated to include: 1) Site Preparation; 2) PV System Installation and Testing, and 3) Site Clean-up and Restoration. The proposed project would consume energy resources during construction in three (3) general forms:

- 1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, as well as delivery and haul truck trips (e.g., hauling of construction waste material to off-site reuse and disposal facilities);
- 2. Electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary

lighting during construction, electronic equipment, or other construction activities necessitating electrical power; and,

3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

#### Construction-Related Electricity

During construction of the proposed project, electricity would be consumed to construct the new structures and infrastructure. Electricity would be supplied to the project site by IID and would be obtained from the existing electrical lines in the vicinity of the project site. The use of electricity from existing power lines rather than temporary diesel or gasoline powered generators would minimize impacts on energy use. Electricity consumed during project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and would cease upon the completion of construction. Overall, construction activities associated with the proposed project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during project construction would not be wasteful, inefficient, or unnecessary.

The proposed project would include installation of an approximately 1.8-mile-long overhead power line from the southern edge of the project site to the North Brawley Geothermal Power Plant substation, which would provide adequate capacity to handle the power generated and utilized by the proposed project. Where feasible, the new service installations and connections would be scheduled and implemented in a manner that would not result in electrical service interruptions to other properties. Compliance with County and IID guidelines and requirements would ensure that the proposed project fulfills its responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with construction of the project. Construction of the project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

#### Construction-Related Petroleum Fuel Use

Petroleum-based fuel usage represents the highest amount of transportation energy potentially consumed during construction, which would be utilized by both off-road equipment operating on the project site and on-road automobiles transporting workers to and from the project site and on-road trucks transporting equipment and supplies to the project site.

The off-road equipment utilized during construction of the proposed project would consume 84,890 gallons of fuel. The on-road trips generated from construction of the proposed project would consume 77,046 gallons of fuel. As such, the combined fuel used from off-road construction equipment and on-road construction trips for the proposed project would result in the consumption of 161,935 gallons of petroleum fuel. This equates to 0.17 percent of the gasoline and diesel consumed annually in Imperial County. As such, the construction-related petroleum use would be nominal, when compared to current county-wide petroleum usage rates.

Construction activities associated with the proposed project would be required to adhere to all State and ICAPCD regulations for off-road equipment and on-road trucks, which provide minimum fuel

efficiency standards. As such, construction activities for the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources. Impacts regarding transportation energy would be less than significant.

### 6.2.2 Operations Energy

The on-going operation of the proposed project would require the use of energy resources for multiple purposes including, but not limited to, heating/ventilating/air conditioning (HVAC), lighting, and electronics. Energy would also be consumed during operations related to water usage and vehicle trips.

#### Operations-Related Electricity

Operation of the proposed project would result in consumption and production of electricity at the project site. The proposed PV solar panels will generate 97,333,333 kWh per year of electricity and operation of the project will use 1,946,667 kWh per year of electricity, which would result in the net generation of 95,386,667 kWh per year of electricity. This equates to 2.8 percent of the electricity consumed annually by IID. As such, the operations-related electricity use would provide a significant renewable resource for the IID and would help IID achieve the State' Renewable Portfolio Standards requirement for non-carbon sources of electricity. No impact would occur from electricity-related energy consumption from the proposed project.

#### Operations-Related Vehicular Petroleum Fuel Usage

Operation of the proposed project would result in increased consumption of petroleum-based fuels related to vehicular travel to and from the project site. The proposed project would consume 1,036 gallons of petroleum fuel per year from vehicle travel. This equates to 0.001 percent of the gasoline and diesel consumed in Imperial County annually. As such, the operations-related petroleum use would be nominal, when compared to current petroleum usage rates

It should be noted that, the proposed project would comply with all Federal, State, and County requirements related to the consumption of transportation energy and would provide a non-carbon source of electricity to power electric vehicles in Imperial County. Thus, impacts with regard transportation energy supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

### 6.2.3 Compliance with State or Local Plans for Renewable Energy or Energy Efficiency

The purpose of the proposed project is the construction of a renewable energy and storage facility in Imperial County. Once in operation, it will decrease the need for energy from fossil fuel-based power plants in the state. The result would be a net increase in electricity resources available to the regional grid, generated from a renewable source. The proposed project would help California meet its Renewable Portfolio Standard of 60 percent of retail electricity sales from renewable sources by the end of 2030 and 100 percent by 2045. Additionally, the project would also be consistent with the County's General Plan Conservation and Open Space Element, Objective 9.2 which encourages renewable energy developments. Therefore, the project would directly support state and local plans for renewable energy development. The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; therefore, no impact would occur.

## 6.3 Mineral Resources

The project site is not used for mineral resource production and the applicant is not proposing any form of mineral extraction. According to Figure 8: Imperial County Existing Mineral Resources of the Conservation and Open Space Element of the General Plan (County of Imperial 2016), no known mineral resources occur within the project site nor does the project site contain mapped mineral resources. Therefore, the proposed project would not result in the loss of availability of any known mineral resources that would be of value to the region and the residents of California nor would the proposed project result in the loss of availability of a locally important mineral resource.

Based on a review of the California Department Division of Oil, Gas, and Geothermal Resources Well Finder, there are two plugged and abandoned geothermal wells (Well No. 02590966 and 02590983) located in the central portion of the project site (APN 037-140-022) (California Department of Oil, Gas, and Geothermal Resources 2021). There is also one idle water well (Well No. 02591498) on the southwestern portion of the project site (APN 037-140-022). The proposed project would be designed to avoid the geothermal wells and water well and would result in no impact.

## 6.4 Noise

Information contained in this section is summarized from the *Noise Impact Analysis for the Brawley Solar Energy Facility Project* prepared by Vista Environmental. This report is included in Appendix I of this EIR. The following analyzes the potential noise emissions associated with the temporary construction activities and long-term operations of the proposed project and compares the noise levels to the County standards. Potential noise impacts from vibration and nearby airports is also analyzed below.

### 6.4.1 Construction-Related Noise

The construction activities for the proposed project are anticipated to include: 1) Site Preparation; 2) PV System Installation and Testing, and 3) Site Clean-up and Restoration. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The nearest sensitive receptors to the project site are single-family homes located as near as 40 feet to the north side of the project site (near the northwest corner of the project site). There are also homes located on the east side of N Best Avenue that are as near as 120 feet east of the project site.

The General Plan Noise Element includes Construction Noise Standards that limits the noise created from construction equipment to 75 dB Leq, averaged over an eight (8) hour period at the nearest sensitive receptor. In addition, the Construction Noise Standards limit construction equipment operation to between the hours of 7 a.m. to 7 p.m., Monday through Friday, and 9 a.m. to 5 p.m. Saturday. No commercial construction operations are permitted on Sunday or holidays.

For each phase of construction, all construction equipment was analyzed based on being placed in the middle of the project site, which is based on the analysis methodology detailed in FTA Manual for a General Assessment. Since the County's construction noise standard is based on the noise level over an 8-hour period and in a typical day the proposed construction equipment would operate over the entire project site, the use of the methodology detailed in the FTA Manual for a General Assessment would provide a reasonable estimate of the construction-related noise levels created by the proposed project.

Table 6-1 shows that greatest construction noise impacts would be as high as 53 dBA Leg during the PV system installation and testing phase at the nearest homes to the northwest, northeast, and southeast of the project site. All calculated construction noise levels shown in Table 6-1 are within the County's construction noise standard of 75 dBA and would also be below the existing ambient daytime noise levels in the vicinity of the nearby homes. Therefore, through adherence to the limitation of allowable construction times provided in the General Plan Noise Element, construction-related noise levels would not exceed any standards established in the General Plan or Noise Ordinance nor would construction activities create a substantial temporary increase in ambient noise levels from construction of the proposed project. Impacts would be less than significant.

| Construction Bhoos   | Construction Noise Lovel (dBA Log) at: |                                   |                                |  |  |  |
|--|--|-----------------------------------|--------------------------------|--|--|--|
| Construction Phase   | Construction Noise Level (UDA Ley) at. |                                   |                                |  |  |  |
|  | Home to Northwest <sup>1</sup>         | Home to<br>Northeast <sup>2</sup> | Home to Southeast <sup>3</sup> |  |  |  |
| Site Preparation   | 52                                     | 52                                | 52                             |  |  |  |
| PV System Installation and Testing   | 53                                     | 53                                | 53                             |  |  |  |
| Site Clean-Up and Restoration  | 52                                     | 52                                | 52                             |  |  |  |
| Construction Noise Threshold <sup>4</sup>  | 75                                     | 75                                | 75                             |  |  |  |
| Ambient Daytime Noise Level  | 66.5                                   | 60.2                              | 62.0                           |  |  |  |
| Exceed Thresholds?   | No                                     | No                                | No                             |  |  |  |
| <sup>1</sup> The distance from the center of the project site to the home to the northwest was measured at 2,900 feet.<br><sup>2</sup> The distance from the center of the project site to the homes to the northeastwas measured at 2,900 feet. |  |                                   |                                |  |  |  |

#### Table 6-1.Construction Noise Levels at the Nearby Homes

<sup>3</sup> The distance from the center of the project site to the home to the southeast was measured at 2,850 feet.

<sup>4</sup> Construction Noise Threshold obtained from the General Plan Noise Element (County of Imperial, 2015).

#### Source: Appendix I of this EIR

#### 6.4.2 **Operational-Related Noise**

The proposed project would consist of the development of a solar facility with a BESS and a substation. Since the proposed project would be operated on an unstaffed basis and monitored remotely from the Brawley Geothermal Power Plant control room, operation of the proposed project would not typically generate any additional vehicle traffic on the nearby roadways. As such, potential noise impacts associated with the operations of the proposed project would be limited to onsite noise sources. The proposed PV solar panels do not create any operational noise, however the proposed BESS Enclosures (AC Unit noise), Power Conversion System, Power Distribution Center that would be located at the BESS, and auxiliary transformers, and Battery Step Up Transformer that would be located at the proposed substation are known sources of noise that have been analyzed below.

Both the General Plan Noise Element and Section 90702.00 provide the same noise level limits at the property line of the nearby homes of 50 dBA Leq-1hour between 7 a.m. and 10 p.m. and 45 dBA Leq-1hour between 10 p.m. and 7 a.m. When the ambient noise level is equal to or exceeds the above noise standards, the proposed noise source shall not exceed the ambient plus 3 dB Leq.

In order to determine the noise impacts from the operation of onsite noise making equipment, noise specifications from previously prepared noise reports were obtained and are shown in Table 6-2. The noise levels from each source were calculated through use of standard geometric spreading of noise from a point source with a drop-off rate of 6 dB for each doubling of the distance between the source and receiver (Appendix I of this EIR).

Table 6-2 shows that the proposed project's onsite operational noise from the anticipated onsite noise sources would not exceed the applicable noise standards at the nearby homes. Therefore, operational onsite noise impacts would be less than significant.

| Noise Source                                   | Home to N                                 | Home to Northwest                           |   | Home to Northeast                           |   | Home to Southeast                           |  |
|--|---|---|---|---|---|---|--|
|  | Distance -<br>Source to<br>Home<br>(feet) | Noise<br>Level <sup>1</sup><br>(dBA<br>Leq) | Distance -<br>Source to<br>Home<br>(feet) | Noise<br>Level <sup>1</sup><br>(dBA<br>Leq) | Distance -<br>Source to<br>Home<br>(feet) | Noise<br>Level <sup>1</sup><br>(dBA<br>Leq) |  |
| BESS Enclosures <sup>2</sup>                   | 5,050                                     | 25  | 5,100                                     | 25  | 850                                       | 40  |  |
| Power Conversion System <sup>3</sup>           | 5,050                                     | 22  | 5,100                                     | 22  | 850                                       | 38  |  |
| Power Distribution Center <sup>4</sup>         | 5,050                                     | 22  | 5,100                                     | 22  | 850                                       | 38  |  |
| Auxiliary Transformers <sup>5</sup>            | 5,030                                     | 31  | 5,280                                     | 31  | 1,150                                     | 44  |  |
| Battery Step up Transformer <sup>6</sup>       | 5,030                                     | 31  | 5,280                                     | 31  | 850                                       | 47  |  |
| Combined Noise Levels                          |   | 35  |   | 35  |   | 50  |  |
| County Noise Standard <sup>7</sup> (day/night) |   | 69.5/67.9                                   |   | 63.2/58.6                                   |   | 65.0/59.2                                   |  |
| Exceed County Noise Standards?                 |   | No/No                                       |   | No/No                                       |   | No/No                                       |  |

| Table 6-2. O | perational | Noise | Levels | at the | Nearby | Homes |
|--------------|------------|-------|--------|--------|--------|-------|
|--------------|------------|-------|--------|--------|--------|-------|

Notes:

<sup>1</sup> The noise levels were calculated through use of standard geometric spreading of noise from a point source with a drop-off rate of 6 dB for each doubling of the distance between the source and receiver.

<sup>2</sup> BESS Enclosures is based on a reference noise measurement of 88.6 dBA at 1 meter.

 $^{3}\,$  Power Conversion System is based on a reference noise measurement of 86.1 dBA at 1 meter.

<sup>4</sup> Power Distribution Center is based on a reference noise measurement of 86.1 dBA at 1 meter.

<sup>5</sup> Auxiliary Transformers are based on a reference noise measurement of 95.1 dBA at 1 meter.

<sup>6</sup> Battery Step up Transformer is based on a reference noise measurement of 95.1 dBA at 1 meter.

<sup>7</sup> County Noise Standard based on ambient noise level shown in Table D plus 3 dB at the nearby homes.

Source: Appendix I of this EIR

## 6.4.3 Construction-Related Vibration Impacts

Vibration impacts from construction activities associated with the proposed project would typically be created from the operation of heavy off-road equipment. The nearest sensitive receptor to the project site is a single-family home located as near as 40 feet to the north side of the project site (near the northwest corner of the project site).

Since neither the Municipal Code nor the General Plan provides any thresholds related to vibration, Caltrans guidance has been utilized, which defines the threshold of perception from transient sources at 0.25 inch per second PPV.

The primary source of vibration during construction would be from the operation of a bulldozer. A large bulldozer would create a vibration level of 0.089 inch per second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest home (40 feet away) would be 0.06 inch per second PPV (Appendix I of this EIR). The vibration level at the nearest home, would be below the 0.25 inch per second PPV threshold detailed above. Impacts would be less than significant.

### 6.4.4 Operations-Related Vibration Impacts

The proposed project would consist of the operation of a solar energy facility. The on-going operation of the proposed project would not include the operation of any known vibration sources. Therefore, a less than significant vibration impact is anticipated from the operation of the proposed project.

### 6.4.5 Airport Noise

The project site is located within 2 miles of a public airport. The nearest airport is the Brawley Municipal Airport located approximately 1.5 miles south of the project site. However, the project site is outside of the airport compatibility zones of the Brawley Municipal Airport (County of Imperial 1996). Therefore, the proposed project would not expose people residing or working in the project area to excess noise levels and no impact is identified for this issue area.

## 6.5 Population and Housing

Development of housing is not proposed as part of the project. The unemployment rate in Imperial County, as of August 2021 was 19.4 percent (State of California Employment Development Department 2021b). The applicant expects to utilize construction workers from the local and regional area, a workforce similar to that involved in the development of other utility-scale solar facilities. Based on the unemployment rate in Imperial County (19.4 percent) (State of California Employment Development Development Department 2021b), and the availability of the local workforce, construction of the proposed project would not have a growth-inducing effect.

Once fully constructed, the project would be operated on an unstaffed basis and be monitored remotely, with periodic on-site personnel visitations for security, maintenance and system monitoring. Therefore, no full-time site personnel would be required on-site during operations and approximately two employees would only be onsite up to four times per year to wash the solar panels. As the project's PV arrays produce electricity passively, maintenance requirements are anticipated to be very minimal. Therefore, the proposed project would not result in a substantial growth in the area, as the number of employees required to operate and maintain the facility is minimal.

No housing exists within the project site and no people reside within the project site. Therefore, the proposed project would not displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere. The proposed project would result in no impact to population and housing.

## 6.6 Public Services

**Schools.** The proposed project does not include the development of residential land uses that would result in an increase in population or student generation. Construction of the proposed project would not result in an increase in student population within the Imperial County's School District since it is anticipated that construction workers would commute in during construction operations. The proposed project would have no impact on Imperial County schools.

**Parks and Other Public Facilities.** No full-time employees are required to operate the project. The project facility will be monitored remotely. It is anticipated that maintenance of the facility will require minimal site presence to perform periodic visual inspections and minor repairs. Therefore, substantial permanent increases in population that would adversely affect local parks, libraries, and other public

facilities are not expected. The project is not expected to have an impact on parks, libraries, and other public facilities.

## 6.7 Recreation

The project site is not used for formal recreational purposes. Also, the proposed project would not generate new employment on a long-term basis. As such, the project would not significantly increase the use or accelerate the deterioration of regional parks or other recreational facilities. Up to 120 construction workers are expected to be on-site per day. The temporary increase of population during construction that might be caused by an influx of workers would be minimal and not cause a detectable increase in the use of parks. Additionally, the project does not include or require the expansion of recreational facilities. Therefore, no impact is identified for recreation.

## 6.8 Utilities and Service Systems

**Wastewater Facilities.** The project would generate a minimal volume of wastewater during construction. During construction activities, wastewater would be contained within portable toilet facilities and disposed of at an approved site. No habitable structures are proposed on the project site, such as O&M buildings; therefore, there would be no wastewater generation from the proposed project. The proposed project would not require or result in the relocation or construction of new or expanded wastewater facilities.

**Storm Water Facilities.** The proposed project will involve the construction of drainage control facilities within the project site, and included in the project impact footprint, of which environmental impacts have been evaluated. Otherwise, the project does not require expanded or new storm drainage facilities off-site (i.e., outside of the project footprint) because the proposed solar facility would not generate a significant increase in the amount of impervious surfaces that would increase runoff during storm events, and therefore, would not require the construction of off-site storm water management facilities. Water from solar panel washing would continue to percolate through the ground, as a majority of the surfaces within the project site would remain pervious. The proposed project would not require or result in the relocation or construction of new or expanded storm water facilities beyond those proposed as part of the project and evaluated in the EIR.

**Water Facilities.** The proposed project is not anticipated to result in a significant increase in water demand/use during operation; however, water will be needed for solar panel washing and dust suppression. During operation, water would be trucked to the project site from a local water source. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded water facilities.

**Power, Natural Gas, and Telecommunication Facilities.** The proposed project would involve construction of powerfacilities. However, these are components of the project as evaluated in the EIR. The proposed project would not otherwise generate the demand for or require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities that would in turn, result in a significant impact to the environment.

**Solid Waste Facilities.** Solid waste generation would be minor for the construction and operation of the project. Solid waste would be disposed of using a locally-licensed waste hauling service, most likely Allied Waste. Trash would likely be hauled to the Imperial Landfill (13-AA-0019) located approximately 11 miles south of the proposed project in Imperial. The Imperial Landfill has approximately 12,384,000 cubic yards of remaining capacity and is estimated to remain in operation

through 2040 (CalRecycle 2021). Therefore, there is ample landfill capacity in the County to receive the minor amount of solid waste generated by construction and operation of the proposed project.

Additionally, because the proposed project would generate solid waste during construction and operation, the project would be required to comply with state and local requirements for waste reduction and recycling; including the 1989 California Integrated Waste Management Act and the 1991 California Solid Waste Reuse and Recycling Access Act of 1991. Also, conditions of the CUP would contain provisions for recycling and diversion of Imperial County construction waste policies.

Further, when the proposed project reaches the end of its operational life, the components would be decommissioned and deconstructed. When the project concludes operations, much of the wire, steel, and modules of which the system is comprised would be recycled to the extent feasible. The project components would be deconstructed and recycled or disposed of safely, and the site could be converted to other uses in accordance with applicable land use regulations in effect at the time of closure. Commercially reasonable efforts would be used to recycle or reuse materials from the decommissioning. All other materials would be disposed of at a licensed facility. A less than significant impact is identified for this issue.

## 6.9 Wildfire

According to the Draft Fire Hazard Severity Zone Map for Imperial County prepared by the California Department of Forestry and Fire Protection, the project site is not located in or near state responsibility areas or lands classified as very high hazard severity zones (California Department of Forestry and Fire Protection 2007). Therefore, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan; expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; exacerbate fire risk; or, expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No impact is identified for wildfire.

This page is intentionally blank.

#### 7 Alternatives

#### 7.1 Introduction

The identification and analysis of alternatives is a fundamental concept under CEQA. This is evident in that the role of alternatives in an EIR is set forth clearly and forthrightly within the CEQA statutes. Specifically, CEQA §21002.1(a) states:

"The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided."

The CEQA Guidelines require an EIR to "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines §15126.6(a)). The CEQA Guidelines direct that selection of alternatives focus on those alternatives capable of eliminating any significant environmental effects of the project or of reducing them to a less-than significant level, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly. In cases where a project is not expected to result in significant impacts after implementation of recommended mitigation, review of project alternatives is still appropriate.

The range of alternatives required within an EIR is governed by the "rule of reason" which requires an EIR to include only those alternatives necessary to permit a reasoned choice. The discussion of alternatives need not be exhaustive. Furthermore, an EIR need not consider an alternative whose implementation is remote and speculative or whose effects cannot be reasonably ascertained.

Alternatives that were considered but were rejected as infeasible during the scoping process should be identified along with a reasonably detailed discussion of the reasons and facts supporting the conclusion that such alternatives were infeasible.

Based on the alternatives analysis, an environmentally superior alternative is designated among the alternatives. If the environmentally superior alternative is the No Project Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives (CEQA Guidelines §15126.6(e)(2)).

#### Criteria for Alternatives Analysis 7.2

As stated above, pursuant to CEQA, one of the criteria for defining project alternatives is the potential to attain the project objectives. Established objectives of the project applicant for the proposed project include:

- Construct, operate and maintain an efficient, economic, reliable, safe and environmentally sound solar-powered electricity generating facility.
- Help meet California's Renewable Portfolio Standard (RPS) requirements, which require that by 2030, California's electric utilities are to obtain 50 percent of the electricity they supply from renewable sources.

- Generate renewable solar-generated electricity from proven technology, at a competitive cost, with low environmental impact, and deliver it to the local markets as soon as possible.
- Develop, construct, own and operate the Brawley Solar Energy Facility, and ultimately sell its electricity and all renewable and environmental attributes to an electric utility purchaser under a long-term contract to meet California's RPS goals.
- Utilize a location that is in close proximity to an existing switching station and powerlines.
- Minimize and mitigate any potential impact to sensitive environmental resources within the project area.

## 7.3 Alternatives Considered but Rejected

### 7.3.1 Alternative Site

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 constructing 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) states that among the factors that may be taken into account when addressing the feasibility of alternative locations are whether the project proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent).

With respect to the proposed project, no significant, unmitigable impacts have been identified. With implementation of proposed mitigation, all potentially significant environmental impacts will be mitigated to a level less than significant.

The Applicant investigated the opportunity to develop the project site in the general project area and determined that the currently proposed project site is the most suitable for development of the solar facility. An alternative site was considered and is depicted on Figure 7-1. As shown, this site is located south of the project site on privately-owned agricultural lands, similar to the project site. The site, located on APNs 037-160-017, 037-160-018, and 037-160-019 totals approximately 282 acres of land.

However, this site was rejected from detailed analysis for the following reasons:

• The alternative location site, as compared to the proposed project site, is located immediately north of State Route 78, a major US State Highway traversed by large numbers of transient public viewers. When compared to the proposed project, the alternative site would result in potentially significant impacts associated with aesthetics and visual quality. While the proposed project identified no significant impacts for aesthetics and visual quality, implementation of the project at the alternative location site has the potential to permanently alter the existing visual character and visual quality of the alternative site, which is characterized by agricultural lands and minor agricultural development under existing viewer locations from SR 78, looking north. As such, aesthetic impacts at the alternative location site, adjacent to SR 78, would be greater than those at the proposed project site, which is located adjacent to small, less-traveled, agricultural roads (N Best Road and Baughman Road), approximately 0.7 mile east of the major thoroughfare, SR 111.

Similarly, a glare hazard analysis prepared for the project (Appendix B of this EIR) concluded that sensitive viewers near the proposed project, including residences, a nearby golf course,

major roadways, and approach slopes associated with the Brawley Municipal Airport, would not experience glare effects from the project. Comparatively, due to the alternative site location's close proximity immediately north of SR 78, potential glare impacts resulting from the solar array would be potentially significant to viewers traveling on SR 78.

- The alternative location site, as compared to the proposed project site, is bisected by the Shellenberger Drain. With the implementation of mitigation, impacts on surface water quality as attributable to the proposed project, which has been designed to avoid bisecting any waterways, would be reduced to a less than significant level. However, construction activities at the alternative site location have the potential to impact hydrology and water quality (due to the presence of the Shellenberger Drain) when compared to the proposed project site.
- No significant, unmitigated impacts have been identified for the proposed project. Construction and operation of the proposed project at this alternative location would likely result in similar impacts associated with the proposed project, or additional impacts (to hydrology and water quality) that are currently not identified for the project at the currently proposed location.

As such, the County considers this alternative location infeasible and rejects further analysis of this alternative because of the factors listed above.

#### Figure 7-1. Alternative Site





- Project Location
  Alternative Site
- --- Gen-Tie Line
- Point of Interconnection



## 7.4 Alternative 1: No Project/No Development Alternative

The CEQA Guidelines require analysis of the No Project Alternative (PRC Section 15126). According to Section 15126.6(e)(1), "the specific alternative of 'no project' shall also be evaluated along with its impact." Also, pursuant to Section 15126.6(e)(2); "The 'no project' analysis shall discuss the existing conditions at the time the notice of preparation is published, ... at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

The No Project/No Development Alternative assumes that the project, as proposed, would not be implemented and the project site would not be further developed with a solar energy project. The No Project/No Development Alternative would not meet a majority of the project objectives.

#### 7.4.1 Environmental Impact of Alternative 1: No Project/No Development Alternative

#### Aesthetics

Under the No Project/No Development Alternative, the project site would not be developed and would continue to be agricultural land. The No Project/No Development Alternative would not modify the existing project site or add construction to the project site; therefore, there would be no change to the existing condition of the site. Under this alternative, there would be no potential to create a new source of light or glare associated with the PV arrays. As discussed in greater detail in Section 3.2, Aesthetics, the proposed project would result in a less than significant impact associated with introduction of new sources of light and glare. Under the No Project Alternative, no new sources of light, glare, or other aesthetic impacts would occur. Under this alternative, light, glare, and aesthetic impacts would be less compared to the project as the existing visual conditions would not change.

#### Agricultural Resources

Under the No Project/No Development Alternative, the project site would not be developed and would continue to be agricultural land. Compared to the proposed project, implementation of this alternative would avoid the conversion of land designated as Prime Farmland (4.44 acres) and Farmland of Statewide Importance (204.95 acres) per the Farmland Mapping and Monitoring Program (FMMP). Therefore, this alternative would not contribute to the conversion of agricultural lands or otherwise adversely affect agricultural operations. Compared to the proposed project, this alternative would avoid the need for future restoration of the project site to pre-project conditions. This alternative would avoid any agricultural impacts associated with the proposed project.

#### Air Quality

Under the No Project/No Development Alternative, there would be no air emissions associated with project construction or operation, and no project- or cumulative-level air quality impact would occur. Therefore, no significant impacts to air quality or violation of air quality standards would occur under this alternative. Moreover, this alternative would be consistent with existing air quality attainment plans and would not result in the creation of objectionable odors.

As discussed in Section 3.4, Air Quality, the proposed project would not exceed the ICAPCD's significance thresholds for emissions of ROG, CO, NOx, and PM<sub>10</sub> during both the construction and

operational phases of the project. Although no significant air quality impacts would occur, all construction projects within Imperial County must comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust. In addition, the ICAPCD's Air Quality Handbook lists additional feasible mitigation measures that may be warranted to control emissions of fugitive dust and combustion exhaust.

This alternative would result in less air quality emissions compared to the proposed project, the majority of which would occur during construction.

#### **Biological Resources**

Under the No Project/No Development Alternative, existing biological resource conditions within the project site would largely remain unchanged and no impact would be identified. Unlike the proposed project which requires mitigation for biological resources including burrowing owl and other migratory birds, this alternative would not result in construction of a solar facility that could otherwise result in significant impacts to these biological resources. Compared to the proposed project, this alternative would avoid impacts to biological resources.

#### Cultural Resources

The proposed project would involve ground-disturbing activities that have the potential to disturb previously undocumented cultural resources that could qualify as historical resources or unique archaeological resources pursuant to CEQA. Under the No Project/No Development Alternative, the project site would not be developed and no construction-related ground disturbance would occur. Therefore, compared to the proposed project, this alternative would avoid impacts to cultural resources.

#### Geology and Soils

Because there would be no development at the project site under the No Project/No Development Alternative, no grading or construction of new facilities would occur. Therefore, there would be no impact to project-related facilities as a result of local seismic hazards (strong ground shaking), soil erosion, and paleontological resources. In contrast, the proposed project would require the incorporation of mitigation measures related to potential seismic hazards, soil erosion, and paleontological resources to minimize impacts to a less than significant level. Compared to the proposed project, this alternative would avoid significant impacts related to local geology and soil conditions and paleontological resources.

#### Greenhouse Gas Emissions

Under the No Project/No Development Alternative, there would be no GHG emissions resulting from project construction or operation or corresponding impact to global climate change. The No Project/No Development Alternative would not help California meet its statutory and regulatory goal of increasing renewable power generation, including GHG reduction goals of SB 32. While this alternative would not further implement policies (e.g., SB X1-2) for GHG reductions, this alternative would also not directly conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. This alternative would not create any new GHG emissions during construction but would not lead to a long-term beneficial impact to global climate change by providing renewable clean energy. For the proposed project, a less than significant impact was identified for construction-related GHG emissions, and in the long-term, the project would result in an overall

beneficial impact to global climate change as the result of creation of clean renewable energy, that does not generate GHG emissions. Compared to the proposed project, while the No Project/No Development Alternative would not result in new GHG emissions during construction, it would be less beneficial to global climate change as compared to the proposed project. Further, the construction emissions (amortized over 30 years) associated with the project would be off-set by the beneficial renewable energy provided by the project, negating any potential that the No Project/No Development alternative would reduce construction-related GHG emissions.

#### Hazards and Hazardous Materials

The No Project/No Development Alternative would not include any new construction. Therefore, no potential exposure to hazardous materials would occur. Therefore, no impact is identified for this alternative for hazards and hazardous materials. As with the proposed project, this alternative would not result in safety hazards associated with airport operations. Compared to the proposed project, this alternative would have less of an impact related to hazards and hazardous materials.

#### Hydrology/Water Quality

The No Project/No Development Alternative would not result in modifications to the existing drainage patterns or volume of storm water runoff as attributable to the proposed project, as the existing site conditions and on-site pervious surfaces would remain unchanged. In addition, no changes with regard to water quality would occur under this alternative. Compared to the proposed project, from a drainage perspective, this alternative would avoid changes to existing hydrology. Like the proposed project, this alternative would not result in the placement of structures within a 100-year flood zone. Under this alternative, there would be no water demand. This alternative would have less of an impact associated with hydrology/water quality as compared to the proposed project.

#### Land Use/Planning

As discussed in Section 3.11, Land Use/Planning, the proposed project would not physically divide an established community or conflict with applicable plans, policies, or regulations.

Under the No Project/No Development Alternative, the project site would not be developed and continue to be agricultural land. Current land uses would remain the same. No General Plan Amendment, Zone Change, or CUP would be required under this alternative. No existing community would be divided, and no inconsistencies with planning policies would occur. Because no significant Land Use and Planning impact has been identified associated with the proposed project, this alternative would not avoid or reduce a significant impact related to this issue and therefore, it is considered similar to the proposed project.

#### **Public Services**

The No Project/No Development Alternative would not increase the need for public services which would otherwise be required for the proposed project (additional police or fire protection services). Therefore, no impact to public services is identified for this alternative. The proposed project will result in less than significant impacts; subject to payment of law enforcement and fire service fees. Compared to the proposed project, this alternative would have fewer impacts related to public services as no new development would occur on the project site.

#### Transportation

There would be no new development under the No Project/No Development Alternative. Therefore, this alternative would not generate vehicular trips during construction or operation. For these reasons, no impact would occur and this alternative would not impact any applicable plan, ordinance, or policy addressing the performance of the circulation system, substantially increase hazards because of a design feature, result in inadequate emergency access, or conflict with public transit, bicycle, or pedestrian facilities. Although the proposed project would result in less than significant transportation/traffic impacts, this alternative would avoid an increase in vehicle trips on local roadways, and any safety related hazards that could occur in conjunction with the increase vehicle trips and truck traffic, primarily associated with the construction phase of the project.

#### Tribal Cultural Resources

As discussed in Section 3.6, Cultural Resources, no tribes have responded that indicate the potential for traditional cultural properties or sacred sites on the project site. Therefore, the project is not anticipated to cause a substantial adverse change in the significance of a tribal cultural resource. Impacts to tribal cultural resources under the No Project/No Development Alternative are similar to the proposed project.

#### Utilities and Service Systems

The No Project/No Development Alternative would not require the expansion or extension of existing utilities, since there would be no new project facilities that would require utility service. No solid waste would be generated under this alternative. The proposed project would not result in any significant impacts to existing utilities or solid waste facilities. Compared to the proposed project, this alternative would have less of an impact related to utilities and solid waste facilities.

#### Conclusion

Implementation of the No Project/No Development Alternative would generally result in reduced impacts for a majority of the environmental issues areas considered in Chapter 3, Environmental Analysis when compared to the proposed project. A majority of these reductions are realized in terms of significant impacts that are identified as a result of project construction. However, this alternative would not realize the benefits of reduced GHG emissions associated with energy use, which are desirable benefits that are directly attributable to the proposed project.

#### Comparison of the No Project/No Development Alternative to Project Objectives

The No Project/No Development Alternative would not meet a majority of the objectives of the project. Additionally, the No Project/No Development Alternative would not help California meet its statutory and regulatory goal of increasing renewable power generation, including GHG reduction goals of SB 32.

## 7.5 Alternative 2: Development within Renewable Energy Overlay Zone – Agricultural Lands

In certain cases, an evaluation of an alternative location in an EIR is necessary. Section 15126.6(f)(2)(A) of the CEQA Guidelines states, "Key question. The key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially

lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR."

Given that the proposed project is not located within the County's RE Overlay Zone, the purpose of this alternative is to develop a project alternative within the existing boundary of County's RE Overlay Zone. The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of renewable energy facilities while minimizing the impact on other established areas.

As shown on Figure 7-2, the Alternative 2 project site is located entirely within the RE Overlay Zone. Alternative 2 would involve the construction and operation of a 40 MW solar energy facility and associated infrastructure on an approximately 231-acre parcel (APN 026-030-008) located approximately 11 miles northeast of Brawley in unincorporated Imperial County. The Alternative 2 project site is designated as Agriculture under the County's General Plan and zoned S-2-RE and A-3-RE (Open Space/Preservation and Heavy Agriculture, both within the RE Overlay Zone).

Similar to the proposed project, Alternative 2 would require approval of a CUP to allow for the construction and operation of a solar project. However, compared to the proposed project, the Alternative 2 project site is located within the RE Overlay Zone and, as such, would not require a General Plan Amendment or Zone Change to include/classify the project site into the RE Overlay Zone. Additionally, while the proposed project (A-2-G Zone) would not require a Variance, the S-2-RE Zone associated with the Alternative 2 site allows a maximum height limit of 40 feet for non-residential structures and 100 feet for communication towers. As such, a Variance would be required under this alternative because the proposed height of the transmission towers (66 feet) and microwave tower (maximum of 100 feet) would exceed 40 feet. This alternative's gen-tie line could potentially interconnect to IID's existing Midway Substation located approximately 4.75 miles northwest of the solar facility. Consultation and coordination with IID would be required to determine if the Midway Substation has existing capacity or would require upgrades for this alternative's interconnection.







Alternative 2 Site

Point of Interconnection

Gen-Tie Line

Geothermal

Renewable Energy/Geothermal

2

0

Miles

# 7.5.1 Environmental Impact of Alternative 2: Development within Renewable Energy Overlay Zone – Agricultural Lands

#### Aesthetics

Compared to the proposed project site, the Alternative 2 project site is comprised of both agricultural and open space lands. Similar to the proposed project, Alternative 2 would alter the existing visual character of the project site by changing the existing land use at the project site from undeveloped open space and/or agricultural to a solar facility. However, the Alternative 2 project site is located approximately 11 miles northeast of Brawley in a relatively remote location. As such, potential impacts to aesthetics would be reduced under Alternative 2 when compared to the proposed project due to the lack of public viewer locations.

#### Agricultural Resources

The Alternative 2 site is designated Farmland of Statewide Importance by the FMMP. Compared to the proposed project, Alternative 2 does not contain Prime Farmland and would avoid the impact to approximately 4.44 acres of Prime Farmland. However, this alternative would still result in the temporary conversion of Farmland of Statewide Importance (approximately 231 acres). Therefore, mitigation would still be required for this alternative to reduce significant farmland impacts to a less than significant level. Compared to the proposed project, development of the Alternative 2 site would have less impacts on agricultural resources because it would avoid the temporary conversion of Prime Farmland to non-agricultural uses.

#### Air Quality

Similar to the proposed project, a 40 MW solar energy facility would be constructed on approximately 231 acres of land. Based on this consideration, this alternative would generate air emissions similar to the proposed project. As discussed in Section 3.4, Air Quality, the proposed project would not exceed the ICAPCD's significance thresholds for ROG, CO, NOx, and PM<sub>10</sub> during construction and operation. Although no significant air quality impacts would occur, all construction projects within Imperial County must comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust. In addition, the ICAPCD's Air Quality Handbook lists additional feasible mitigation measures that may be warranted to control emissions of fugitive dust and combustion exhaust. This alternative would result in similar air quality emissions as the proposed project. Similar to the proposed project, this alternative would result in temporary odor emissions from construction equipment.

#### **Biological Resources**

Similar to the proposed project, the Alternative 2 site is located on agricultural fields, which provide habitat for burrowing owl. Irrigation canals and drains are commonly used as burrowing nesting sites in the Imperial Valley. This alternative would also require the construction of supporting infrastructure that has the potential to result in biological impacts. Compared to the proposed project, this alternative would result in similar biology impacts.

#### Cultural Resources

This alternative would require the construction of supporting infrastructure (i.e., transmission towers, substation) that would require ground disturbance and therefore, has the potential to result in cultural resources impacts. Compared to the proposed project, which is located on active agricultural land that

has been previously disturbed, the Alternative 2 site is predominantly located on open space land. As such, although this alternative would attempt to avoid cultural resources to the extent feasible, depending on the route of the proposed gen-tie line, Alternative 2 could result in greater impacts to previously undiscovered cultural resources.

#### Geology and Soils

Grading and construction of new facilities, such as the solar facility and gen-tie line, would still occur under this alternative. Similar to the proposed project, Alternative 2 would result in potentially significant impacts related to strong ground shaking, soil erosion, and paleontological resources and would require the incorporation of mitigation measures to minimize these impacts to a less than significant level. This alternative would result in similar geology and soil and paleontological resources impacts as the proposed project.

#### Greenhouse Gas Emissions

This alternative would result in the same power production capacity as the proposed project; hence, the overall benefits of the project to global climate change through the creation of renewable energy would be the same. Alternative 2 would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. This alternative would contribute similar and desirable benefits to reductions in global climate change through the production of renewable energy.

#### Hazards and Hazardous Materials

Depending on the specific locations and conditions of the Alternative 2 project site that would need to be developed, certain hazards and hazardous materials may be encountered. The Alternative 2 project site may need to be remediated before implementation of the alternative. Overall, the degree of impact associated with hazards and hazardous materials would likely be similar to the proposed project.

#### Hydrology/Water Quality

With implementation of the proposed mitigation measures, potential hydrology/water quality impacts under the proposed project would be less than significant. Comparatively, the Alternative 2 site is bisected by the Mammoth Wash and the gen-tie alignment is longer, and, as such, construction activities have the potential to impact hydrology and water quality to a greater extent than would occur under the proposed project. Similar to the proposed project, no impacts would result from flooding and facilities will not be placed within floodplains.

#### Land Use/Planning

The Alternative 2 project site is located within the RE Overlay Zone and would not require a General Plan Amendment or Zone Change to include/classify the project site into the RE Overlay Zone. Similar to the proposed project, Alternative 2 will require approval of a CUP to allow for the construction and operation of a solar project. Additionally, while the proposed project (A-2-G Zone) would not require a Variance, the S-2-RE Zone associated with the Alternative 2 site allows a maximum height limit of 40 feet for non-residential structures and 100 feet for communication towers. As such, a Variance would be required under this alternative because the proposed height of the transmission towers (70 feet) and microwave tower (maximum of 100 feet) would exceed 40 feet. With approval of the CUP and

Variance, the alternative would not conflict with the County's zoning ordinance. Therefore, land use and planning impacts are anticipated to be similar to the proposed project.

#### **Public Services**

Alternative 2 would require increased public services, specifically law enforcement and fire protection services. While the solar facility footprint would be slightly smaller (reduced by approximately 4 acres), the impacts of this alternative to public services and associated service ratios would be similar. Like the proposed project, this alternative would be conditioned to provide law enforcement and fire service development impact fees. Therefore, this alternative would result in a similar impact related to public services as the proposed project.

#### Transportation

This alternative would result in a similar level of construction and operation-related vehicle and truck trips as compared to the proposed project. However, the increase in vehicular traffic was identified as a less than significant impact for the proposed project. In this context, Alternative 2 would not reduce or avoid an impact related to transportation/traffic, and would result in less than significant impacts similar to the proposed project. As with the proposed project, Alternative 2 would not impact any applicable plan, ordinance, or policy addressing the performance of the circulation system, substantially increase hazards because of a design feature, result in inadequate emergency access, or conflict with public transit, bicycle, or pedestrian facilities. This alternative would result in a similar impact related to transportation as the proposed project.

#### Tribal Cultural Resources

This alternative would require the construction of supporting infrastructure (i.e., transmission towers, substation) that would require ground disturbance and therefore, has the potential to result in tribal cultural resources impacts. Although this alternative would attempt to avoid impacts on tribal cultural resources to the extent feasible, depending on the route of the proposed gen-tie line, Alternative 2 could result in greater impacts to tribal cultural resources.

#### Utilities and Service Systems

During construction of this alternative, impacts would be similar to the proposed project in terms of water demand (for dust control) and solid waste generation. Similar to the proposed project, Alternative 2 would require similar levels of water demand and energy for the operation of the solar facility. As with the proposed project, panel washing and other maintenance would be required. This alternative would have similar water demands and associated impacts related to utilities and service systems.

#### Conclusion

As shown on Table 7-1, this alternative would result in reduced aesthetics and agricultural resources impacts compared to the proposed project. This alternative would result in greater impacts for the following environmental issue areas as compared to the proposed project: cultural resources, hydrology and water quality, and tribal cultural resources.

Comparison of Alternative 2: Development within Renewable Energy Overlay Zone – Agricultural Lands to Project Objectives

Alternative 2 would meet most of the basic objectives of the proposed project and should remain under consideration. However, this alternative would result in greater impacts for the following environmental issue areas as compared to the proposed project: cultural resources, hydrology and water quality, and tribal cultural resources. Further, the project applicant does not own, or otherwise control this property.

## 7.6 Alternative 3: Development within Renewable Energy Overlay Zone – Desert Lands

The purpose of this alternative is to develop the proposed project within the existing boundary of the County's RE Overlay Zone. As shown on Figure 7-3, the Alternative 3 project site is located entirely within the RE Overlay Zone. Alternative 3 would involve the construction and operation of a solar energy facility and associated infrastructure on five parcels totaling approximately 288 acres (APN 021-190-003; 021-380-004; 021-380-005; 021-380-012; and 021-380-013) located approximately 0.5 mile south of Slab City. This alternative is 61 acres larger than the proposed project site. Therefore, more solar panels could be installed on this site compared to the proposed project. The Alternative 3 project site is located on undeveloped desert land. Existing transmission lines traverse the southwest corner of the project site.

The Alternative 3 project site is located within the RE Overlay Zone and would not require a General Plan Amendment or Zone Change to include/classify the project site into the RE Overlay Zone. The Alternative 3 project site is designated as Recreation under the County's General Plan and zoned General Agricultural with a renewable energy overlay (A-2-RE).

Similar to the proposed project, Alternative 3 will require approval of a CUP to allow for the construction and operation of a solar project. Compared to the proposed project, the Alternative 3 project site is located within the RE Overlay Zone and would not require a General Plan Amendment or Zone Change to include/classify the project site into the RE Overlay Zone. Similar to the proposed project site, the A-2-RE zone allows a maximum height limit of 120 feet for non-residential structures. No Variance would be required under this alternative because the proposed height of the transmission towers (66 feet) would not exceed 120 feet. This alternative's gen-tie line could potentially interconnect to IID's existing Midway Substation located approximately 4 miles southeast of the solar facility. Consultation and coordination with IID would be required to determine if the Midway Substation has existing capacity or would require upgrades for this alternative's interconnection.

APN 021-190-003 APN 021-380-004 APN 021-380-005 Davis Rd APN 021-380-012 Niland-Pegleg Well Rd Noffsinger Rd APN 021-380-013 111 Cenel Rd Midway Substation Simpson Rd Estelle Rd CoxRd Montgomery Rd Wilkinson Rd Eddins Rd law Rd Mac Fadden Rd 115 Rg Pickett Rd 111 **Biles** Rd Park Av W Rutherford Rd Herd Rd PN 037-140-021 APN 037-140-020 APN 037-140-023 APN 037-140-022 APN 037-140-006 Shank Rd

Figure 7-3. Alternative 3: Development within Renewable Energy Overlay Zone – Desert Lands



## 7.6.1 Environmental Impact of Alternative 3: Development within Renewable Energy Overlay Zone – Desert Lands

#### Aesthetics

While the proposed project site is located on active agricultural land, the Alternative 3 project site is located on undeveloped desert land. However, the Alternative 3 project site is located in closer proximity (approximately 0.5 mile) to Slab City and Salvation Mountain. Slab City is a former military facility that now serves as the site of an informal community for artists, travelers, and winter-time RV campers. Salvation Mountain is an outdoor art project at the western entrance to Slab City. Both attract tourists and sight-seers. Therefore, the project components would be readily visible to more people under Alternative 3 when compared to the proposed project. Compared to the proposed project, this alternative could result in greater aesthetics impacts.

#### Agricultural Resources

The Alternative 3 site is designated Other Land by the FMMP. Compared to the proposed project, implementation of this alternative would avoid the conversion of land designated as Prime Farmland (4.44 acres) and Farmland of Statewide Importance (204.95 acres). Therefore, this alternative would not contribute to the conversion of agricultural lands or otherwise adversely affect agricultural operations. This alternative would avoid any agricultural impacts associated with the proposed project.

#### Air Quality

This alternative is 61 acres larger than the proposed project site. Therefore, more solar panels could be installed on this site compared to the proposed project. Based on this consideration, this alternative would generate slightly increased air emissions compared to the proposed project. This alternative would result in greater air quality emissions compared to the proposed project.

#### **Biological Resources**

As discussed in Section 3.5, project implementation has the potential to impact special-status species, including burrowing owl. Compared to the proposed project, which is located within an active agricultural area, the Alternative 3 site is located on relatively undisturbed desert lands. The overall number of burrowing owl locations potentially impacted would be less because their potential to occur on the Alternative 3 site is lower than the proposed project site. Compared to the proposed project, development of this site would have less impacts on burrowing owl. However, this alternative has the potential to impact other sensitive plant and animal species associated with a relatively undisturbed desert setting.

The Alternative 3 site also contains desert washes and multiple braided channels. These features could be considered potentially jurisdictional waters. While the proposed project has been designed to avoid jurisdictional waters, Alternative 3 would require consultation with USACE and CDFW to avoid or minimize impacts upon federally and state jurisdictional drainage features. This alternative would result in greater impacts related to potential jurisdictional waters when compared to the proposed project.

#### Cultural Resources

This alternative would require the construction of supporting infrastructure (i.e., transmission towers, substation) that would require ground disturbance and therefore, has the potential to result in cultural

resources impacts. While Alternative 3 may avoid the specific impacts on the proposed project site, this alternative would also require the construction of supporting infrastructure that has the potential to result in cultural resources impacts. Compared to the proposed project, although Alternative 3 would attempt to avoid cultural resources to the extent feasible, depending on the route of the proposed gen-tie line, this alternative could result in greater impacts on cultural resources because, while the proposed project site is located on active agricultural land, Alternative 3 is located on relatively undisturbed desert lands.

#### Geology and Soils

Grading and construction of new facilities, such as the solar facility and gen-tie line, would still occur under this alternative. Similar to the proposed project, this alternative would result in potentially significant impacts related to strong ground shaking, soil erosion, and paleontological resources and would require the incorporation of mitigation measures to minimize these impacts to a less than significant level. This alternative would result in similar geology and soil and paleontological resources impacts as the proposed project.

#### Greenhouse Gas Emissions

This alternative is 61 acres larger than the proposed project site. Therefore, more solar panels could be installed on this site compared to the proposed project. This alternative would result in a slightly higher power production capacity compared to the proposed project; hence, the overall benefits of the project to global climate change through the creation of renewable energy would be slightly greater. This alternative would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Similar to the proposed project, this alternative would contribute desirable benefits to reductions in global climate change through the production of renewable energy.

#### Hazards and Hazardous Materials

Depending on the specific locations and conditions of the Alternative 3 project site that would need to be developed, certain hazards and hazardous materials may be encountered. The Alternative 3 project site may need to be remediated before implementation of the alternative. Overall, the degree of impact associated with hazards and hazardous materials would likely be similar to the proposed project.

#### Hydrology/Water Quality

A portion of the Alternative 3 site (Map Number 06025C0450C) contains an area mapped as Zone A. Alternative 3 could place structures (i.e., PV arrays, substation, or transmission towers) within a 100-year flood zone and result in the redirection of flood flows on the project site. The Alternative 3 site also contains desert washes and multiple braided channels. Implementation of this alternative could potentially result in the modification of the existing drainage patterns and the volume of storm water runoff on the project site. Compared to the proposed project, this alternative would result in greater impacts related to hydrology/water quality.

#### Land Use/Planning

The Alternative 3 project site is located within the RE Overlay Zone and would not require a General Plan Amendment or Zone Change to include/classify the project site into the RE Overlay Zone. Similar to the proposed project, Alternative 3 will require approval of a CUP to allow for the construction and

operation of a solar project. Similar to the proposed project, no Variance would be required under this alternative because the proposed height of the transmission towers (66 feet) would not exceed the 120 feet height limit of non-residential structures in the A-2-RE Zone. With approval of the CUP, the alternative would not conflict with the County's zoning ordinance. Therefore, land use and planning impacts are anticipated to be similar to the proposed project.

#### **Public Services**

Alternative 3 would require increased public services, specifically law enforcement and fire protection services. While the overall project footprint would be bigger (increased by approximately 61 acres), the impacts of this alternative to public services and associated service ratios would be similar. Like the proposed project, this alternative would be conditioned to provide law enforcement and fire service development impact fees. Therefore, this alternative would result in a similar impact related to public services as the proposed project.

#### Transportation

This alternative is 61 acres larger than the proposed project site. Therefore, more solar panels could be installed on this site compared to the proposed project. This alternative would result in a slightly increased level of construction and operation-related vehicle and truck trips as compared to the proposed project. However, the increase in vehicular traffic was identified as a less than significant impact for the proposed project. In this context, Alternative 3 would not reduce or avoid an impact related to transportation/traffic, and would result in less than significant impacts similar to the proposed project. As with the proposed project, this alternative would not impact any applicable plan, ordinance, or policy addressing the performance of the circulation system, substantially increase hazards because of a design feature, result in inadequate emergency access, or conflict with public transit, bicycle, or pedestrian facilities. This alternative would result in a similar impact related to transportation/traffic as the proposed project.

#### Tribal Cultural Resources

This alternative would require the construction of supporting infrastructure (i.e., transmission towers, substation) that would require ground disturbance and therefore, has the potential to result in tribal cultural resources impacts. Although this alternative would attempt to avoid impacts on tribal cultural resources to the extent feasible, depending on the route of the proposed gen-tie line, Alternative 3 could result in greater impacts to tribal cultural resources.

#### Utilities and Service Systems

This alternative is 61 acres larger than the proposed project site. Therefore, more solar panels could be installed on this site compared to the proposed project. Construction and operation of this alternative would result in slightly increased water demand (for dust control) and solid waste generation. Compared to the proposed project, this alternative would have greater water demands and associated impacts related to utilities and service systems.

#### Conclusion

As shown on Table 7-1, this alternative would avoid impacts on agricultural resources compared to the proposed project. This alternative would result in greater impacts for the following environmental

issue areas as compared to the proposed project: aesthetics, air quality, biological resources, cultural resources, hydrology/water quality, tribal cultural resources, and utilities and service systems.

## Comparison of Alternative 3: Development within Renewable Energy Overlay Zone – Desert Land to Project Objectives

Alternative 3 would meet most of the basic objectives of the proposed project and should remain under consideration. However, this alternative would result in greater impacts for the following environmental issue areas as compared to the proposed project: aesthetics, air quality, biological resources, cultural resources, hydrology/water quality, tribal cultural resources, and utilities and service systems. Further, the project applicant does not own, or otherwise control this property.

## 7.7 Alternative 4: Distributed Commercial and Industrial Rooftop Solar Only Alternative

This alternative would involve the development of a number of geographically distributed small to medium solar PV systems (100 kilowatts to 1 MW) within existing developed areas, typically on the rooftops of commercial and industrial facilities throughout Imperial County. Under this alternative, no new land would be developed or altered. Depending on the type of solar modules installed and the type of tracking equipment used, a similar or greater amount of acreage (i.e., greater than 200 acres of total rooftop area) may be required to attain the proposed project's capacity of 40 MW of solar PV generating capacity. This alternative would involve placement of PV structures, transmission lines, and development of additional supporting facilities, such as switching stations and substations at various locations throughout the County. This alternative assumes that rooftop development would occur primarily on commercial and industrial structures due to the greater availability of large, relatively flat roof areas necessary for efficient solar installations.

This alternative would require hundreds of installation locations across Imperial County, many of which would require approval of discretionary actions, such as design review, CUPs, or zone variances depending on local jurisdictional requirements. Similar to the proposed project, this alternative would be designed to operate year-round using PV panels to convert solar energy directly to electrical power. This alternative would involve the construction of transmission lines and development of additional supporting facilities, such as switching stations and substations at various locations throughout the County to distribute the energy.

Rooftop PV systems exist in small areas throughout California. Larger distributed solar PV installations are becoming more common. An example of a distributed PV system is 1 MW of distributed solar energy installed by Southern California Edison on a 458,000 square-foot industrial building in Chino, California.<sup>1</sup>

Similar to utility-scale PV systems, the acreage of rooftops or other infrastructure required per MW of electricity produced is wide ranging, which is largely due to site-specific conditions (e.g., solar insolation levels, intervening landscape or topography, PV panel technology, etc.). Based on SCE's use of 458,000-square feet for 1 MW of energy, approximately 18,320,000 square feet (approximately 420 acres) would be required to produce 40 MW.

<sup>1</sup> 

http://newsroom.edison.com/releases/califomia-regulators-approve-southern-california-edison-proposal-to-create-n ations-largest-solar-panel-installation-program

## 7.7.1 Environmental Impact of Alternative 4: Distributed Commercial and Industrial Rooftop Solar Only Alternative

#### Aesthetics

This alternative would reduce the overall size of the solar energy field located in one place. However, this alternative would involve placement of PV structures, transmission lines, and development of additional supporting facilities, such as switching stations and substations at various locations throughout the County. There could be significant aesthetic impacts in certain areas depending on the locations of these facilities. Transmission lines would need to be constructed to serve the PV generation sites, all of which would be placed in closer proximity to urban areas, and all of which would be more readily visible to more people as compared to the proposed project. Compared to the proposed project, this alternative could result in greater aesthetics impacts.

#### Agricultural Resources

Compared to the proposed project, this alternative would not include the conversion of Prime Farmland or Farmland of Statewide Importance for the solar generation facility. Therefore, this alternative would avoid the proposed project's impact to agricultural lands. Compared to the proposed project, this alternative would avoid the significant impacts associated with the agricultural issues.

#### Air Quality

Under this alternative, air emissions due to project construction could be less than the proposed project on a localized level; however, PV facilities and supporting infrastructure would still need to be constructed to support this alternative, which, like the proposed project, would involve short-term construction emissions. These emissions would likely be spread-out geographically throughout the basin, and would occur over a longer period of time, as this alternative would involve a longer overall timeframe for implementation. Furthermore, the construction efficiencies that can be obtained by mobilizing equipment and crews in one general location over a shorter timeframe would not be realized. By the nature of the alternative, in that solar panels would be constructed on habitable structures throughout the County, this alternative has the potential to expose more people to more localized construction-related emissions. Compared to the proposed project, this alternative would develop less renewable energy megawatt generation in the near-future, thereby reducing its ability to provide a long-term source of renewable energy and meeting renewable energy goals, and air quality impacts could be greater than those of the project under this alternative.

#### **Biological Resources**

Under this alternative, potential direct and indirect impacts to burrowing owl would be avoided as compared to the proposed project. However, this alternative would also require the construction of supporting infrastructure that has the potential to result in biological impacts. While this alternative may avoid the specific impacts associated with the proposed project, it could also result in greater biological impacts in other areas of the County where supporting infrastructure is required to support Distributed Energy facilities.

#### **Cultural Resources**

This alternative would require the construction of infrastructure that has the potential to result in cultural resources impacts. If rooftop solar panels were proposed on historic buildings, this alternative could

affect the historic character and integrity of the buildings. Implementation of this alternative would require historic surveys and investigations to evaluate the eligibility of potentially historic structures that are over 50 years old, and either avoidance of such buildings, or incorporation of design measures to minimize impacts on historic integrity of historically-significant structures. Compared to the proposed project, this alternative could result in greater impacts related to cultural resources.

#### Geology and Soils

This alternative would involve placement of PV structures, transmission lines, and development of additional supporting facilities, such as switching stations and substations at various locations throughout the County. This alternative assumes that rooftop development would occur primarily on commercial and industrial structures due to the greater availability of large, relatively flat roof areas necessary for efficient solar installations. However, this alternative would still require grading and construction of new facilities such as transmission lines, PV structures, and supporting facilities (i.e., switching stations and substations) at various locations throughout the County. This alternative would likely result in similar impacts related to strong ground shaking, soil erosion, and paleontological resources as the proposed project. This alternative would also be subject to similar mitigation measures as the proposed project to minimize impacts to a less than significant level. This alternative would result in similar geological and soil impacts.

#### Greenhouse Gas Emissions

Under this alternative, the project footprint would be reduced; however, in order to achieve the same megawatt capacity as the proposed project, this alternative would also involve a surface area similar in size to the project site. Therefore, while this alternative could reduce or eliminate GHG emissions during project construction at the project site, an equivalent level of GHG emissions is likely to occur, as a result of constructing solar panels and supporting infrastructure throughout the County. Furthermore, as a consequence of the reduced PV footprint associated with the utility-scale solar farm, this alternative would result in a reduced power production capacity as compared to the proposed project; hence, the overall benefits of the project to global climate change through the creation of renewable energy would also be reduced. As with the proposed project, this alternative would result in reduced project, although this alternative would result in reduced construction for the purpose of reducing the emissions of greenhouse gases. Compared to the proposed project, although this alternative would result in reduced construction emissions at the project site, overall, a similar level of emissions would be expected.

#### Hazards and Hazardous Materials

Hazards and hazardous materials-related impacts, including the potential for accidental discovery of undocumented hazardous materials during construction would be avoided. However, there are other hazards that could result from implementation of this alternative, depending on the specific locations and conditions of the various sites that would need to be developed. For example, electrical infrastructure would be placed on top of, or in closer proximity to habitable structures, such as office buildings. Electrical transmission systems would still be required in order to connect the various distributed energy systems to the electrical grid; therefore, there would be additional poles and other structures that could interfere with aviation, depending on their locations. Certain sites needed in order to implement this alternative may also contain hazardous materials that would need to be remediated before implementation of the alternative. Overall, the degree of impact associated with hazards and hazardous materials would likely be similar to the proposed project.

#### Hydrology/Water Quality

This alternative would likely avoid any impacts associated with modifications to the existing drainage patterns and the volume of storm water runoff, as this alternative would introduce less impervious surface areas (this alternative would involve construction of PV facilities on existing structures and within existing developed areas). Compared to the proposed project, this alternative would result in fewer impacts related to hydrology/water quality.

#### Land Use/Planning

Similar to the proposed project, this alternative would not divide an established community and would involve multiple planning approvals (e.g., variances, CUPs, rezones) in order to accommodate the solar generating uses within other zones of the County that currently do not allow such uses. With approval of planning approvals, land use and planning impacts resulting from this alternative would be similar to the proposed project.

#### Public Services

This alternative would require increased public services, specifically law enforcement and fire protection services. It is anticipated that public services and associated service ratios would, at a minimum, be similar to the proposed project as the facilities would require fire and law enforcement protection, and this alternative could result in a greater impact as the facilities would be distributed over a much larger geographical area. Similar to the proposed project, this alternative would be conditioned to provide law enforcement and fire service fees. This alternative would result in a similar impact related to public services.

#### Transportation

This alternative would not reduce or avoid an impact to transportation/traffic and would result in less than significant impacts similar to the proposed project. As with the proposed project, this alternative would not impact any applicable plan, ordinance, or policy addressing the performance of the circulation system, substantially increase hazards due to a design feature, result in inadequate emergency access, or conflict with public transit, bicycle, or pedestrian facilities. This alternative would result in a similar impact related to transportation/traffic as the proposed project.

#### Tribal Cultural Resources

This alternative would require the construction of supporting infrastructure that would require ground disturbance and therefore, has the potential to result in tribal cultural resources impacts. Although this alternative would attempt to avoid impacts on tribal cultural resources to the extent feasible, depending on the location of supporting infrastructure, Alternative 4 could result in greater impacts to tribal cultural resources.

#### Utilities and Service Systems

As with the proposed project, this alternative would require water service and energy for the operation of the project. This alternative would involve the construction of transmission lines and development of additional supporting facilities, such as switching stations and substations at various locations throughout the County to distribute the energy. Compared to the proposed project, this alternative could require the relocation or construction of new or expanded supporting energy infrastructure throughout the County. Compared to the proposed project, impacts associated with utilities and service

systems resulting from this alternative could be potentially greater than those identified for the proposed project.

#### Conclusion

As shown on Table 7-1, implementation of Alternative 4: Distributed Commercial and Industrial Rooftop Solar Only Alternative would avoid impacts on agricultural resources compared to the proposed project. It would result in reduced impacts for the following environmental issue areas as compared to the proposed project: hydrology/water quality. Overall, this alternative would result in greater impacts related to aesthetics, air quality, biological resources, cultural resources, tribal cultural resources, and utilities and service systems.

## Comparison of Alternative 4: Distributed Commercial and Industrial Rooftop Solar Only Alternative

Alternative 4: Distributed Commercial and Industrial Rooftop Solar Only Alternative would meet most of the basic objectives of the proposed project. However, this alternative would result in greater impacts for the following environmental issue areas as compared to the proposed project: aesthetics, air quality, biological resources, cultural resources, and utilities and service systems. Furthermore, this alternative would have a number of drawbacks, including, but not limited to the following:

- Difficulties with respect to buildout of the system within a timeframe that would be similar to that of the proposed project;
- Given the distributed nature of such a network of facilities, management and maintenance would not be as efficient, and total capital costs would likely be higher;
- The requirement to negotiate with a large number of individual property owners to permit placement of solar panels on rooftops;
- The difficulty of ensuring proper maintenance of a large number of smaller solar installations; and
- The lack of an effective electricity distribution system for large numbers of small electricity producers.

## 7.8 Environmentally Superior Alternative

Table 7-1 provides a qualitative comparison of the impacts for each alternative compared to the proposed project. As noted on Table 7-1, the No Project/No Development Alternative would be considered the environmentally superior alternative, since it would eliminate all of the significant impacts identified for the project. However, 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 among the other alternatives." As shown on Table 7-1, Alternative 2 would be the environmental superior alternative because it would reduce impacts for the following environmental issue areas as compared to the proposed project: aesthetics and agricultural resources. Alternative 2 would meet most of the basic objectives of the proposed project. However, the project applicant does not own, or otherwise control this property.

This page is intentionally blank.

| Environmental<br>Issue Area | Proposed<br>Project                         | Alternative 1:<br>No Project/No<br>Development   | Alternative 2:<br>Development within<br>Renewable Energy<br>Overlay Zone –<br>Agricultural Lands                       | Alternative 3:<br>Development within<br>Renewable Energy<br>Overlay Zone – Desert<br>Lands                             | Alternative 4:<br>Distributed Commercial<br>and Industrial Rooftop<br>Solar Only Alternative          |
|-----------------------------|---|--|--|--|---|
| Aesthetics                  | Less than<br>Significant                    | CEQA Significance:<br>No Impact<br>Comparison to Proposed<br>Project:<br>Less Impact         | CEQA Significance:<br>Potentially Significant<br>Comparison to Proposed<br>Project:<br>Less Impact                     | CEQA Significance:<br>Potentially Significant<br>Comparison to Proposed<br>Project:<br>Greater Impact                  | CEQA Significance:<br>Potentially Significant<br>Comparison to Proposed<br>Project:<br>Greater Impact |
| Agricultural<br>Resources   | Less than<br>Significant with<br>Mitigation | CEQA Significance:<br>No Impact<br>Comparison to Proposed<br>Project:<br>Avoid               | CEQA Significance:<br>Less than Significant with<br>Mitigation<br>Comparison to Proposed<br>Project:<br>Less Impact    | CEQA Significance:<br>No Impact<br>Comparison to Proposed<br>Project:<br>Avoid   | CEQA Significance:<br>No Impact<br>Comparison to Proposed<br>Project:<br>Avoid                        |
| Air Quality                 | Less than<br>Significant                    | CEQA Significance:<br>No Impact<br>Comparison to Proposed<br>Project:<br>Less Impact         | CEQA Significance:<br>Less than Significant<br>Comparison to Proposed<br>Project:<br>Similar                           | CEQA Significance:<br>Potentially Significant<br>Comparison to Proposed<br>Project:<br>Greater Impact                  | CEQA Significance:<br>Potentially Significant<br>Comparison to Proposed<br>Project:<br>Greater Impact |
| Biological<br>Resources     | Less than<br>Significant with<br>Mitigation | CEQA Significance:<br>No Impact<br>Comparison to Proposed<br>Project:<br>Less Impact (Avoid) | CEQA Significance:<br>Less than Significant with<br>Mitigation<br>Comparison to Proposed<br>Project:<br>Similar Impact | CEQA Significance:<br>Less than Significant with<br>Mitigation<br>Comparison to Proposed<br>Project:<br>Greater Impact | CEQA Significance:<br>Potentially Significant<br>Comparison to Proposed<br>Project:<br>Greater Impact |

| Environmental<br>Issue Area | Proposed<br>Project            | Alternative 1:<br>No Project/No<br>Development | Alternative 2:<br>Development within<br>Renewable Energy<br>Overlay Zone –<br>Agricultural Lands | Alternative 3:<br>Development within<br>Renewable Energy<br>Overlay Zone – Desert<br>Lands | Alternative 4:<br>Distributed Commercial<br>and Industrial Rooftop<br>Solar Only Alternative |
|-----------------------------|--------------------------------|--|--|--|--|
| Cultural Resources          | Less than                      | CEQA Significance:                             | CEQA Significance:   | CEQA Significance:   | CEQA Significance:   |
|                             | Mitigation                     | No Impact                                      | Potentially Significant  | Potentially Significant  | Potentially Significant  |
|                             |                                | Comparison to Proposed<br>Project:             | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   |
|                             |                                | Less Impact (Avoid)                            | Greater Impact   | Greater Impact   | Greater Impact   |
| Geology and Soils           | Less than                      | CEQA Significance:                             | CEQA Significance:   | CEQA Significance:   | CEQA Significance:   |
|                             | Significant with<br>Mitigation | No Impact                                      | Less than Significant with<br>Mitigation   | Less than Significant with<br>Mitigation   | Less than Significant with<br>Mitigation   |
|                             |                                | Comparison to Proposed<br>Project:             | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   |
|                             |                                | Less Impact (Avoid)                            | Similar Impact   | Similar Impact   | Similar Impact   |
| GHG Emissions               | Less than<br>Significant       | CEQA Significance:                             | CEQA Significance:   | CEQA Significance:   | CEQA Significance:   |
|                             |                                | No Impact                                      | Less than Significant  | Less than Significant  | Less than Significant  |
|                             |                                | Comparison to Proposed<br>Project:             | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   |
|                             |                                | Less Impact                                    | Similar Impact   | Similar Impact   | Similar Impact   |
| Hazards and                 | Less than                      | CEQA Significance:                             | CEQA Significance:   | CEQA Significance:   | CEQA Significance:   |
| Hazardous<br>Materials      | Significant                    | No Impact                                      | Less than Significant  | Less than Significant  | Less than Significant  |
|                             |                                | Comparison to Proposed<br>Project:             | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   |
|                             |                                | Less Impact                                    | Similar Impact   | Similar Impact   | Similar Impact   |

| Environmental<br>Issue Area | Proposed<br>Project | Alternative 1:<br>No Project/No<br>Development | Alternative 2:<br>Development within<br>Renewable Energy<br>Overlay Zone –<br>Agricultural Lands | Alternative 3:<br>Development within<br>Renewable Energy<br>Overlay Zone – Desert<br>Lands | Alternative 4:<br>Distributed Commercial<br>and Industrial Rooftop<br>Solar Only Alternative |
|-----------------------------|---------------------|--|--|--|--|
| Hydrology/Water             | Less than           | CEQA Significance:                             | CEQA Significance:   | CEQA Significance:   | CEQA Significance:   |
| Quality                     | Mitigation          | No Impact                                      | Less than Significant with<br>Mitigation   | Potentially Significant  | Less than Significant with<br>Mitigation   |
|                             |                     | Comparison to Proposed<br>Project:             | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   |
|                             |                     | Less Impact (Avoid)                            | Greater Impact   | Greater Impact   | Less Impact  |
| Land Use/Planning           | Less than           | CEQA Significance:                             | CEQA Significance:   | CEQA Significance:   | CEQA Significance:   |
|                             | Significant         | No Impact                                      | Less than Significant  | Less than Significant  | Less than Significant  |
|                             |                     | Comparison to Proposed<br>Project:             | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   |
|                             |                     | Similar Impact                                 | Similar Impact   | Similar Impact   | Similar Impact   |
| Public Services Less than   | Less than           | CEQA Significance:                             | CEQA Significance:   | CEQA Significance:   | CEQA Significance:   |
|                             | Significant         | No Impact                                      | Less than Significant  | Less than Significant  | Less than Significant  |
|                             |                     | Comparison to Proposed<br>Project:             | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   |
|                             |                     | Less Impact                                    | Similar Impact   | Similar Impact   | Similar Impact   |
| Transportation              | Less than           | CEQA Significance:                             | CEQA Significance:   | CEQA Significance:   | CEQA Significance:   |
| Si                          | Significant         | No Impact                                      | Less than Significant  | Less than Significant  | Less than Significant  |
|                             |                     | Comparison to Proposed<br>Project:             | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   |
|                             |                     | Less Impact                                    | Similar Impact   | Similar Impact   | Similar Impact   |

| Environmental<br>Issue Area  | Proposed<br>Project      | Alternative 1:<br>No Project/No<br>Development | Alternative 2:<br>Development within<br>Renewable Energy<br>Overlay Zone –<br>Agricultural Lands | Alternative 3:<br>Development within<br>Renewable Energy<br>Overlay Zone – Desert<br>Lands | Alternative 4:<br>Distributed Commercial<br>and Industrial Rooftop<br>Solar Only Alternative |
|------------------------------|--------------------------|--|--|--|--|
| Tribal Cultural              | Less than                | CEQA Significance:                             | CEQA Significance:   | CEQA Significance:   | CEQA Significance:   |
| Resources                    | Significant              | No Impact                                      | Potentially Significant  | Potentially Significant  | Potentially Significant  |
|                              |                          | Comparison to Proposed<br>Project:             | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   |
|                              |                          | Similar Impact                                 | Greater Impact   | Greater Impact   | Greater Impact   |
| Utilities/Service<br>Systems | Less than<br>Significant | CEQA Significance:                             | CEQA Significance:   | CEQA Significance:   | CEQA Significance:   |
|                              |                          | No Impact                                      | Less than Significant  | Less than Significant  | Less than Significant  |
|                              |                          | Comparison to Proposed<br>Project:             | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   | Comparison to Proposed<br>Project:   |
|                              |                          | Less Impact                                    | Similar Impact   | Greater Impact   | Greater Impact   |

Notes:

CEQA=California Environmental Quality Act; GHG=greenhouse gas