CHAPTER 5.0
ALTERNATIVES

CEQA Guidelines Section 15126.6(a) states that an environmental impact report shall describe and analyze a range of reasonable alternatives to a project. These alternatives should feasibly attain most of the basic objectives of the project while avoiding or substantially lessening one or more of the significant environmental impacts of the project. An EIR need not consider every conceivable alternative to a project, nor is it required to consider alternatives that are infeasible. The discussion of alternatives shall focus on those which are capable of avoiding or substantially lessening any significant effects of the project, even if they impede the attainment of the project objectives to some degree or would be more costly (CEQA Guidelines Section 15126.6(b)).

CEQA Guidelines Section 15126.6(d) states that the EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed Project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed. The matrix appears as **Table 5.0-1** at the end of this section.

5.1 PROJECT OBJECTIVES

A primary objective of the Drew Solar Project is to develop a solar energy generating and energy storage facility that will produce public benefits for Imperial County, the Southern California Region, and the State of California. The following is a list of key public benefits that are fundamental to the Project's objectives:

- To create significant lease revenue for Imperial Irrigation District ("IID") as the property owner, a public agency, which will benefit the citizens of Imperial County.
- To support the Imperial County General Plan renewable energy policies and objectives.
- To locate the Project at a location along the existing transmission system which has available capacity to deliver electricity to major load centers in California.
- To meet the terms and requirements of any Power Purchase Agreement (PPA) and Large Generator Interconnection Agreement ("LGIA") that the Applicant has or may enter into and that require it to be interconnected directly to the CAISO grid at the existing Drew Switchyard.
- To deploy a technology that is safe, readily available, efficient, and environmentally responsible.
- To generate power, and store energy in an efficient manner and at a cost that is competitive in the renewable market on sites controlled by the applicant.
- To provide an additional source of renewable energy to assist the State of California in achieving and exceeding the RPS.
- To maximize local construction jobs for a variety of trades thereby helping maximize the reduction of unemployment in the construction sector.
- To locate the Project in an area that ranks among the highest in solar resource potential in the nation, as measured by the CEC.
- To minimize potential impacts to aesthetics, health and safety and other potential environmental impacts:

  o Locating the Project on disturbed land.

- Grouping or collocating the Project's proposed electrical interconnection facilities with existing or proposed electrical interconnection facilities (consistent with County conditions on similar solar generation projects), to the extent that such grouping/collocation can be accommodated.
- Utilizing existing infrastructure (switchyards, transmission lines, roads, and water sources) where feasible to locate the project proximate to existing electric interconnection and transmission systems in Imperial County with capacity to deliver electricity to major load centers in California.

- To diversify Imperial County's economic base.
- To provide tax revenue through sales, use and property taxes generated by development within Imperial County.

5.2 ALTERNATIVES CONSIDERED BUT NOT SELECTED FOR ANALYSIS

The identification of a reasonable range of alternatives for analysis in the DEIR was informed by the Project proposal, the key Project objectives, and the criteria identified in the CEQA Guidelines section 15126.6. the key Project objectives are discussed above. CEQA Guidelines section 15125.6(a) provides that an EIR "shall 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. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible." CEQA Guidelines section 15125.6(c) further provides that "[a]mong the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (1) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts." CEQA and the CEQA Guidelines define "feasible" as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors. (Public Resources Code Section 21061.1; CEQA Guidelines, Section 15364).

The proposed Project site is currently designated "Agriculture" in the Imperial County General Plan and currently zoned A-2 (General Agricultural Zone), A-2-R (General Agricultural Zone/Rural Zone), and A-3 (Heavy Agricultural). Solar energy electrical generators, electrical power generating plants, substations, and facilities for the transmission of electrical energy are allowed as uses in the A-2 designation with a Conditional Use Permit (CUP).

Both on-site and off-site alternatives were considered during the EIR scoping phase. Alternative sites were screened in accordance with CEQA Guidelines section 15126.6(f) on the basis of whether selection of the site would avoid or substantially lessen the Project's potentially significant impacts, feasibility, and consistency with County planning documents. Based on the nature of the Project, factors considered in determining technological feasibility included the availability of: 1) an area with access to high solar insolation rates (i.e. exposure to the sun's rays); 2) a large area to accommodate solar collectors; and 3) readily accessible interconnection to the California Independent System Operator (CAISO)-operated transmission system to send electricity to consumers; and) potential for co-location of transmission infrastructure.

Considerable efforts were undertaken to avoid impacts to agricultural land, cultural resources, and biological resources. West-central Imperial County has year-round, unobstructed access to sunlight during daytime hours. The area surrounding the Imperial Valley Substation was searched for a site with the least impacts.

5.2.1 CENTINELA STATE PRISON LAND ALTERNATIVE

The Centinela State Prison Land Alternative included 860 acres owned by the State of California and is part of the Centinela State Prison (**Figure 5.0-1A and Figure 5.0-1B**). This site was previously farmed but had been fallow for decades. The site had also been ripped, disked, and devoid of vegetation. A 40-acre portion of the site is owned by the federal government and managed by the Bureau of Land Management. This portion was identified as a Development Focus Area in the Desert Renewable Energy Conservation Plan. In order to connect a solar energy generating facility on this site to the Dunaway Switchyard, a 1.5-mile gen-tie would have had to be constructed over undisturbed land.

The Applicant was unable to acquire, control, or gain access to the site because the State of California rejected the proposal and declined to allow the land to be utilized for the Project's solar energy production. Accordingly, the Centinela State Prison Land Alternative was eliminated during the scoping state on the basis of feasibility.

5.2.2 DESERT LAND ALTERNATIVE

This Alternative examined other areas of land near the Centinela State Prison on desert land. However, desert land has a significant number of cultural resources and sensitive biological resources. Further, this land is part of the Yuha Desert Area of Critical Environmental Concern. For these reasons, the Desert Land Alternative was rejected and not pursued as a viable alternative.

5.2.3 SALTON SEA ALTERNATIVE

This Alternative examined other areas along the exposed playa of the Salton Sea which falls within the Renewable Energy Overlay Zone (**Figure 5.0-1C**). However, the corrosive and wet soil that was subject to liquefaction made the Project infeasible at this location. For these reasons, the Salton Sea Land Alternative was rejected and not pursued as a viable alternative.

5.2.4 DISTRIBUTED GENERATION ALTERNATIVE

A Distributed Generation Alternative to the proposed Project was considered but not selected for detailed analysis because it would not advance the majority of the key Project objectives. A distributed PV generation alternative would consist of small-scale PV installations on private or publicly-owned residential, commercial, or industrial building rooftops, parking lots or areas adjacent to existing structures such as substations. The location of such small-scale installations is not geographically constrained and, as relevant for CEQA purposes, could be located anywhere in the State. Governor Brown established a goal of adding 12,000 MW of renewable distributed generation by 2020. As of December 31, 2017, more than 11,700 MW of distributed generation capacity was operating or installed in California with an additional 340 MW pending. Preliminary data reported through the first four months of 2018 indicate that California is on track to exceed the 12,000 MW distributed generation goal ahead of schedule (CEC 2018).

Assuming that there are enough additional sites throughout California for installation of sufficient distributed PV to accomplish the Project's objective of generating 100 MW, the Distributed Generation Alternative cannot feasibly accomplish most of the Project's objectives. Such an alternative would not comply with the terms and requirements of the Project's long-term Power Purchase Agreements (PPAs). Likewise, a distributed generation alternative could not locate the solar energy generating facilities as near as possible to SDG&E's electrical transmission facilities with anticipated capacity availability and a reserved queue position.

Because distributed generation is not geographically constrained, there is no guarantee that any portion of the solar installation would occur in Imperial County. Furthermore, the County has no authority or influence over the installation of distributed PV generation systems outside of its jurisdiction. As such,

Source: Drew Solar 2018c.

FIGURE 5.0-1A
CENTINELA STATE PRISON LAND ALTERNATIVE

Source: Drew Solar 2018c.

FIGURE 5.0-1B
CENTINELA STATE PRISON LAND ALTERNATIVE

there is no guarantee that action by the County to approve a distributed generation alternative would 1) result in the installation of 100 MW of generating capacity; 2) support the objective of assisting the State of California to meet to its RPS goals; or 3) create additional construction employment and Project-related expenditures in local businesses. Furthermore, such an alternative would not comply with the terms and requirements of the Project's long-term Power Purchase Agreement(s) (PPAs). For these reasons, a distributed solar alternative was not considered for further analysis.

5.3 SUMMARY OF ALTERNATIVES ANALYZED

In accordance with the provisions of CEQA Guidelines Section 15126.6, the following alternatives were selected for analysis.

5.3.1 ALTERNATIVE 1 – REDUCED PRIME FARMLAND ALTERNATIVE

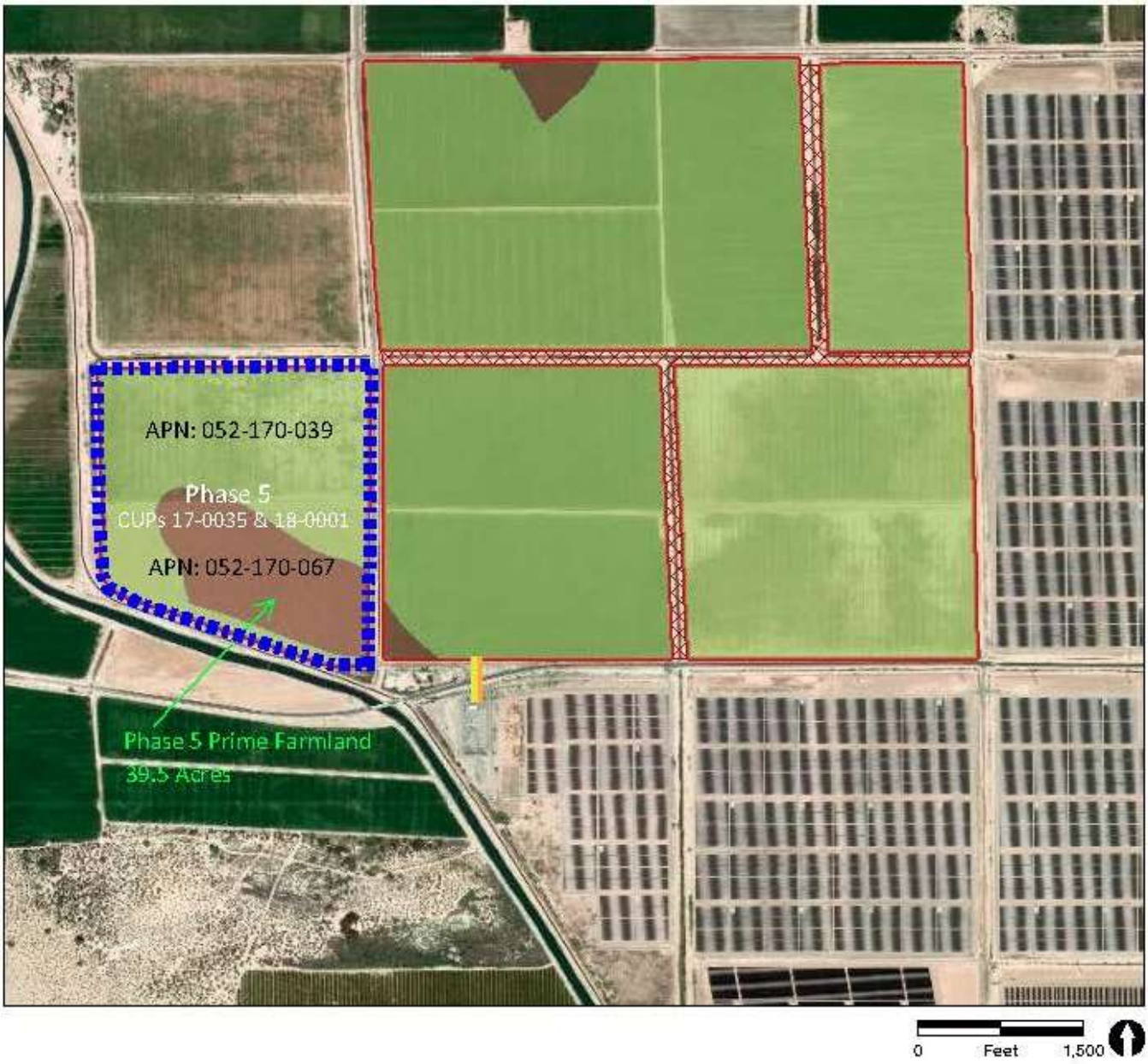
The Reduced Prime Farmland Alternative would exclude the portion of the proposed Project west of Drew Road within CUP#17-0035 and CUP#18-0001 that is Prime Farmland (**Figure 5.0-2**). This alternative would eliminate 39.5 acres of Prime Farmland from being developed with a solar field and energy storage as a component of solar. The Reduced Prime Farmland Alternative would require the same number of solar arrays to be constructed on a smaller footprint, increasing the site density. Placing solar panels at a greater density would increase shading and reduce the solar generation potential of the site by 10 to 40 percent. Shading the solar panels would waste a significant amount of potential energy that could be produced from each module.

5.3.2 ALTERNATIVE 2 – NO PROJECT ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(1) requires that a No Project Alternative be analyzed in order to allow the decision-makers to compare the impacts of approving a proposed Project with the impacts of not approving the proposed Project. Under the No Project Alternative, the proposed Drew Solar Project would not be developed. No GPA, Zone Change, CUPs, Variance, Parcel Map, Lot Tie Agreements or Development Agreement would be approved and the Project site would retain its current land use designation and zoning. The Project site is currently designated "Agriculture" in the Imperial County General Plan and is currently zoned A-2 (General Agricultural Zone), A-2-R (General Agricultural Zone/Rural Zone), and A-3 (Heavy Agricultural), and could be developed consistent with the land use designation and zoning. Alternatively, the Project site could remain in its existing condition as flat crops.

5.4 ANALYSIS OF ALTERNATIVES

This section identifies the environmental effects of the alternatives and compares the environmental effects with those resulting from the proposed Project. **Table 5.0-1** at the end of this section provides a summary of the comparisons. An "environmentally superior" alternative is also identified.



Source: Drew Solar 2018c.

FIGURE 5.0-2
REDUCED PRIME FARMLAND ALTERNATIVE

5.4.1 ALTERNATIVE 1 - REDUCED PRIME FARMLAND ALTERNATIVE

Alternative 1 is the Reduced Prime Farmland Alternative. This alternative would exclude the portion of the proposed Project west of Drew Road (CUP#17-0035 & CUP#18-0001) and would reduce potential impacts to Prime Farmland. This alternative avoids 39.5-acres of Prime Farmland (**Figure 5.0-2**).

This discussion analyzes the impacts of this alternative by projecting what can reasonably be expected to occur in the foreseeable future if the Project were implemented with the Reduced Prime Farmland Alternative as compared to the proposed Project.

Characteristics

Under the Reduced Prime Farmland Alternative, the Drew Solar Project would be constructed with all the same features as the proposed Project with the exception that 39.5 acres of Prime Farmland would be avoided. As a result, this alternative would require the same number of solar arrays to be constructed on a smaller foot print, increasing the site density. Placing solar panels at a greater density would increase shading and would reduce the solar generation potential of the site by 10 to 40 percent. The Project would require approval of: General Plan Amendment (GPA#17-0006); Zone Change (ZC#17-0007); Variance (V# 17-0003); five CUPs (CUP#17-0031, CUP#17-0032, CUP#17-0033, CUP#17-0034, CUP#17-0035) to develop solar energy generating and energy storage systems, and one CUP#18-0001 to develop energy storage as a component of solar on lands currently zoned A-2, A-2-R and A-3; Parcel Map (PM#02478); Lot Tie Agreement(s); and a Development Agreement.

Under this Alternative, at the end of the Project's operational life, the solar energy generating and energy storage facility would be decommissioned, removed and reclaimed to approximate the existing agricultural land currently zoned A-2 (General Agricultural Zone), A-2-R (General Agricultural Zone/Rural Zone), and A-3 (Heavy Agricultural) in the County's Land Use Ordinance and designated Agriculture in the County's General Plan.

Relationship to Project Objectives

Implementation of the Reduced Prime Farmland Alternative would result a reduction in conversion of Prime Farmland by reducing the size of the Project on CUPs 17-0035 and 18-0001. Implementation of the Reduced Prime Farmland Alternative would advance the Project's objectives to construct and operate solar power and energy storage facilities with less potential impacts to the environment by avoiding approximately 39.5 acres of Prime Farmland. However, because this alternative does not maximize the site's solar generation capabilities by optimally spacing the solar arrays, it does not represent the most efficient use of agricultural land for the purpose of renewable energy generation. Additionally, the Reduced Prime Farmland Alternative would not meet the following key objectives to the same degree as the proposed Project because it would restrain the maximum generating capacity of the site:

- To support the Imperial County General Plan renewable energy policies and objectives
- To deploy a technology that is safe, readily available, efficient, and environmentally responsible.
- To provide an additional source of renewable energy to assist the State of California in achieving and exceeding the RPS.
- To locate the Project in an area that ranks amount the highest in solar resource potential in the nation, as measured by the CEC.
- To minimize potential impacts to aesthetics, health and safety and other potential environmental impacts.
- To diversify Imperial County's economic base.

- To provide tax revenue through sales, use and property taxes generated by development within Imperial County.

Therefore, the Reduced Prime Farmland Alternative would not achieve as many objectives as the proposed Project.

Comparative Impacts

Aesthetics

Under the Reduced Prime Farmland Alternative, the aesthetic condition of the Project site would be altered in association with development of solar energy generating facilities and energy storage as a component of solar (i.e. battery storage containers or building). However, CUP#15-0035 and CUP#18-0001 would occupy approximately 39.5 less acres and development on APN 052-170-067-000 would be set-back from Mandrapa Road and Drew Road in association with avoidance of prime farmland. As with the proposed Project, the Reduced Prime Farmland Alternative would have similar less than significant impacts on a scenic vista and degradation of the visual quality of the site and its surroundings. As development would be set-back further from Mandrapa Road and Drew Road to avoid prime farmland, security lighting would be less visible than under this Alternative compared to the proposed Project. Therefore, potential impacts to aesthetics, including light and glare would be slightly less for the Reduced Prime Farmland Alternative compared to the proposed Project.

Land Use

The Project Area has an existing General Plan land use designation of "Agriculture" and a zoning designation of A-2 (General Agricultural Zone), A-2-R (General Agricultural Zone/Rural Zone), and A-3. Solar energy electrical generators, electrical power generating plants, substations, and facilities for the transmission and storage of energy are allowed as conditional uses in the A-2, A-2-R and A-3 zones. Similar to the proposed Project, the Reduced Prime Farmland Alternative would require approval of: General Plan Amendment (GPA#17-0006); Zone Change (ZC#17-0007); Variance (V#17-0003); a total of five CUPs (CUP#17-0031, CUP#17-0032, CUP#17-0033, CUP#17-0034, CUP#17-0035) to develop solar energy generating and energy storage systems; and one CUP#18-0001 to develop energy storage as a component of solar on lands currently zoned A-2, A-2-R and A-3; Parcel Map (PM#02478); Lot Tie Agreement(s); and a Development Agreement.

Under the Reduced Prime Farmland Alternative, 39.5 acres of prime farmland would be avoided primarily on APN 052-170-067-000 thereby reducing the size of the solar field and energy storage as a component of solar proposed for this portion of the Project. The reduction in size would not result in any land use conflicts or issues with General Plan Policies. Therefore, impacts would be less than significant and similar for both the Reduced Prime Farmland Alternative and the proposed Project.

Transportation

Despite a slight reduction in the amount of acreage that would be developed (39.5 acres), short-term construction-related traffic generated by the Reduced Prime Farmland Alternative would increase similar to the proposed Project. Long-term increases in vehicle traffic related to operation and maintenance would be similar for both the Reduced Prime Farmland Alternative and the proposed Project under all traffic scenarios modeled (Existing Year 2017; Near-Term Year 2019; Long-Term (Year 2027). Similar to the proposed Project, the Reduced Prime Farmland Alternative includes the same access points, including a primary access off of Drew Road north of Mandrapa Road (refer to Figure 2.0-3 in Chapter 2.0, Project Description). Under both this alternative and the proposed Project, no hazards due to a design feature would occur. Roadway damage attributed to construction traffic would likely be similar as many of the same roads would be used for both the Reduced Prime Farmland Alternative and the proposed Project.

Overall, potential impacts related to roadway Level of Service standards, hazardous design features, roadway damage, and cumulative impacts to intersections, roadway segments and freeway segments would be similar for both the Reduced Prime Farmland Alternative and the proposed Project.

Air Quality

Under the Reduced Prime Farmland Alternative, short-term construction-related air quality impacts would be slightly less than those of the proposed Project because of the reduction in amount of land developed associated with avoiding 39.5 acres of prime farmland. A slight reduction in combustion emissions and dust (including NO_X and PM_{10}) would be anticipated because less acreage would be disturbed. Because prime farmland within the boundaries of CUP#15-0035 and CUP#18-0001 would be avoided, construction would be set-back further from the closest single-family residence located immediately west of the intersection of Drew Road and SR 98. Diesel equipment could create temporary adverse odors during construction for both the Reduced Prime Farmland Alternative and the proposed Project. However, the odors would be temporary and no sensitive receptors would be impacted.

Overall, potential impacts related to air quality plans and standards, sensitive receptors and objectionable odors, would be less than significant and but greater for the Reduced Prime Farmland Alternative compared to the proposed Project. Potential impacts related to violating an air quality standard and cumulative violations of an air quality standard would be less for the Reduced Prime Farmland Alternative compared to the proposed Project based on 39.5 fewer acres being disturbed as a result of avoiding prime farmland.

Greenhouse Gases

Under the Reduced Prime Farmland Alternative, short-term construction-related greenhouse gas/climate impacts are anticipated to be similar to, though slightly less than, the proposed Project due to the reduction in acreage associated with avoidance of 39.5 acres of prime farmland. Because this acreage would not be developed, equipment would be operating/emitting GHGs for a shorter period of time in association with less acreage disturbed. GHG emissions during operation and maintenance of the Reduced Prime Farmland Alternative are expected to be greater compared to those generated by the proposed Project as 39.5 acres of Prime Farmland would still be farmed requiring farm equipment and associated emissions. GHG's generated during construction and reclamation activities would be less than significant and no impact would occur with regard to conflicting with an applicable plan, policy or regulation adopted to reduce GHG emissions for both the proposed Project and the Reduced Prime Farmland Alternative.

Geology and Soils

Under the Reduced Prime Farmland Alternative, approximately 39.5 acres of prime farmland primarily within the boundaries of APN 052-170-067. A State of California, Alquist-Priolo Earthquake Fault Zone extends into this APN (refer to Figure 4.6-2 in Section 4.6, Geology and Soils). This is an unnamed fault that was mapped after the 7.2 Mw El Mayor-Cucapah Earthquake (LandMark 2018, p. 6). Avoidance of prime farmland would also provide greater set-back of solar development from this fault. Due to the reduction in prime farmland acreage, the Reduced Prime Farmland Alternative would result in less solar structures being exposed to geologic and seismic hazards (strong seismic ground shaking, liquefaction, soil erosion, expansive soils, soil capability to support on-site wastewater treatment; and soil corrosivity) compared to the proposed Project. Less soil disturbance and excavation on 39.5 fewer acres also would result in less potential to impact previously unknown paleontological resources, if present. Overall, geology and soils impacts (including impacts to previously unknown paleontological resources) for the Reduced Prime Farmland Alternative would be less compared to the proposed Project.

Cultural Resources & Tribal Cultural Resources

Under the Reduced Prime Farmland Alternative, potential to disturb historical resources and unanticipated archaeological resources (prehistoric isolates) would be less than would occur under the proposed Project due to the avoidance of 39.5 acres of prime farmland primarily with APN 052-170-067. No specific resources were identified within this APN. However, unanticipated archaeological resources, and previously unknown subsurface human remains may be discovered during construction. Mitigation measures have been identified to address these impacts. Because 39.5 acres of prime farmland would be avoided (i.e. not developed) in association with the Reduced Prime Farmland Alternative, impacts to historical resources, unanticipated archaeological resources, previously unknown subsurface human remains and tribal cultural resources would be slightly less compared to the proposed Project.

Noise

Avoiding 39.5 acres of prime farmland would result in less construction, operation and decommissioning noise primarily on APN 052-170-067. No noise levels standards would be exceeded in association with construction, operation and decommissioning of both the proposed Project and the same is true for the Reduced Prime Farmland Alternative. However, avoiding the 39.5 acres would provide a greater set-back from the nearest sensitive receptor immediately west of the intersection of Drew Road and SR 98 (approximately 100 feet from Project site; a bee company operates out of this location). Therefore, noise level increases as sensitive receptors would be less in association with the Reduced Prime Farmland Alternative compared to the proposed Project.

Agricultural Resources

The greatest amount of prime farmland (39.5 acres) within the overall Project site (total of 48.3 acres) is within the boundaries of APN 052-170-067 on which CUP 17-0035 and 18-0001 are proposed. The Reduced Prime Farmland Alternative would avoid and thereby preserve 39.5 acres of prime farmland that would otherwise be developed with solar facilities as part of the proposed Project. The same amount of farmland of local importance (155.2 acres) and farmland of statewide importance (559.3 acres) would be developed in association with both the Reduced Prime Farmland Alternative and the proposed Project. However, compared to the proposed Project, the Reduced Prime Farmland Alternative would result in conversion of less acreage of prime farmland as well as the need for mitigation to offset impacts to prime farmland. Overall, impacts to agricultural resources, specifically with regard to prime farmland, would be less for the Reduced Prime Farmland Alternative compared to the proposed Project.

Hazards and Hazardous Materials

Risks associated with site hazards, including construction activities and conditions (e.g., soil disturbance, use of hazardous materials associated with construction activities), and operational activities (e.g., transport, use and storage of fuel and herbicides) are anticipated to be less than significant and similar for both the Reduced Prime Farmland Alternative and the proposed Project. Avoiding approximately 39.5 acres of prime farmland as part of the Reduced Prime Farmland Alternative would result in slightly less need for transport, use, disposal and accidental release of hazardous materials used during construction, operation and decommissioning. Hazard through risk of upset or release of hazardous materials is not an issue at the Project site. Thus, less than significant, similar impacts, would result for both the Reduced Prime Farmland Alternative and the proposed Project.

Hydrology and Water Quality

Under the Reduced Prime Farmland Alternative, impacts associated with a violation of water quality standards or waste discharge requirements would be less than significant similar to the proposed Project. Under the Reduced Prime Farmland Alternative, 39.5 acres of Prime Farmland would be avoided. This

acreage is primarily within the boundaries of APN 052-170-067 on which CUP#17-0035 and CUP#18-0001 are proposed. However, the avoidance of Prime Farmland not result in any change in on- or off-site flooding or create or contribute runoff exceeding capacity. Both the Reduced Prime Farmland Alternative and the proposed Project would maintain existing drainage patterns and the Project site would remain largely impervious. Compliance with provisions of the Construction General Stormwater Permit and Stormwater Pollution Prevention Plan would be applicable to both the Reduced Prime Farmland Alternative and the proposed Project such that erosion or on- or off-site siltation would be less than significant.

Overall potential impacts for the Reduced Prime Farmland Alternative depletion of groundwater supplies or interference with groundwater recharge; substantial erosion or siltation on- or off-site; or placement of people or structures within an area subject to flood hazards would be less than significant and similar to the proposed Project.

Biological Resources

Under the Reduced Prime Farmland Alternative, 39.5 acres of prime farmland within the boundaries of APN 052-170-067 would be avoided. The entire vegetation community within this area is identified as Agriculture which provides suitable habitat for burrowing owl. At the time of the Project site surveys, no burrowing owls were observed nor were any burrows identified within the boundaries of APN 052-170-067 (i.e. CUP#17-0035 and CUP#18-0001). However, owls could be present at the time pre-construction surveys are conducted. Avoiding 39.5 acres of prime farmland could result in avoiding owls and burrows if present at the time of construction. However, this cannot be determined at this time. Therefore, impacts to burrowing owls are considered potentially significant and similar for both the Reduced Prime Farmland Alternative and the proposed Project.

Suitable habitat for California Black Rail and Yuma Ridgeway's Rail is present within irrigation ditches located within the boundaries of the Project site. Thus, impacts with regard to California Black Rail and Yuma Ridgeway's Rail would be similar for both the Reduced Prime Farmland Alternative and the proposed Project.

The Project site contains Arrow Weed Thickets and Cattail Marshes Alliance. However, neither of these species is within the 39.5 acres of prime farmland that would be avoided under the Reduced Prime Farmland Alternative. Thus, impacts to Arrow Weed Thickets and Cattail Marshes Alliance would be similar for both the Reduced Prime Farmland Alternative and the proposed Project.

Jurisdictional Resources are located throughout the Project site. The nearest ditch is to the east of CUP 17-0035 and CUP 18-0001 outside the 39.5 acres of prime farmland that would be avoided as part of the Reduced Prime Farmland Alternative. However, development of CUP#17-0031 could still impact habitat in these ditches. Thus, impacts to wetlands/jurisdictional resources would be similar for both the Reduced Prime Farmland Alternative and the proposed Project.

No impacts to wildlife corridors/habitat linkage would occur in association with either the Reduced Prime Farmland Alternative or the proposed Project. Thus, impacts with regard to wildlife corridors/habitat linkage are similar for both the Reduced Prime Farmland Alternative and the proposed Project

Public Services and Utilities

The Reduced Prime Farmland Alternative would result in public services impacts similar to the proposed Project. Specifically, under both the Reduced Prime Farmland Alternative and proposed Project, a similar increase in the demand for fire services and law enforcement services would occur because under both the Reduced Prime Farmland Alternative and the proposed Project, similar activities, structures, and infrastructure are proposed. Reducing the amount of prime farmland by 39.5 acres while reducing the

overall acreage of the Project would not lessen demand for fire protection or law enforcement as compared to the proposed Project.

Both the Reduced Prime Farmland Alternative and the proposed Project would rely on water from the IID for construction and operational water. The Reduced Prime Farmland Alternative may have an O&M Building Complex with on-site water treatment facilities similar to the proposed Project. Water demand for construction and operation would be less if the Reduced Prime Farmland Alternative is implemented because 39.5 fewer acres would be developed as part of CUP#17-0035 and CUP#18-0001. This reduction in acreage would result in less demand water for dust control during construction and potentially fewer panels to wash during operation. The IID Canal system and water entitlements are adequate to meet the proposed water demands and the Project would not cause a need to expand water entitlements. While water entitlements would not be affected by the Reduced Prime Farmland Alternative, water demand would be greater as compared to the proposed Project as 39.5 acres of prime farmland would continue to be farmed.

With 39.5 fewer acres developed under the Reduced Prime Farmland Alternative, less impervious surfaces would be introduced to APN 052-170-067. While groundwater recharge would not be adversely affected if the proposed Project was implemented, the Reduced Prime Farmland Alternative would allow slightly more surface for groundwater recharge as compared to the proposed Project.

Avoidance of 39.5 acres of prime farmland would reduce the amount of developable acreage for CUP 17-0035 and CUP 18-0001, including area for development of an O&M Building and supporting facilities. However, soils throughout the Project site are suitable to support septic systems and leach fields. Thus, if an O&M Building is constructed on CUP#17-0035 and/or CUP#18-0001, despite the reduction in acreage, soils would be able to support an on-site wastewater treatment system. Wastewater impacts would be less than significant for both the Reduced Farmland Alternative and the proposed Project.

Avoiding 39.5 acres of prime farmland would slightly reduce the amount of solid waste generated by the Project and the associated amount of landfill capacity required to accommodate the construction and operational waste. Impacts to solid waste and land fill capacity would be less than significant for both the Reduced Prime Farmland Alternative and the proposed Project.

Electrical service would be required from IID for both the Reduced Prime Farmland Alternative and the proposed Project. Avoiding 39.5 acres of prime farmland would not change the need to construct the two proposed Gen-Tie lines and associated infrastructure to connect to the Drew Switchyard. Impacts to electrical service would be less significant for both the Reduced Prime Farmland Alternative and the proposed Project.

Telephone and internet service would be required from AT&T for both the Reduced Prime Farmland Alternative and the proposed Project. Avoiding 39.5 acres of Prime Farmland would not change the need for telephone and internet service at the Project site. Impacts to telephone and internet service would be less significant for both the Reduced Prime Farmland Alternative and the proposed Project.

Energy

Energy would be required as part of construction, operation and decommissioning of both the Reduced Prime Farmland Alternative and the proposed Project in the form of fuel associated with worker commutes and equipment operation. The Reduced Prime Farmland Alternative would decrease the amount of fuel required during construction, operation and decommissioning of a solar facility and energy storage component on 39.5 acres of land. The Project does not have any unusual characteristics that would result in excessive fuel consumption from on-road vehicles. Fuel consumption associated with on-road vehicle trips generated by the Project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Thus, impacts to energy resources would be

less than significant and similar for both the Reduced Prime Farmland Alternative and the proposed Project.

Both the Reduced Prime Farmland Alternative and the proposed Project would not use substantial amounts of local and regional energy supplies or create requirements for additional capacity. As discussed in detail in Section 4.14, each CUP would produce more electricity than it would consume. As such neither the Reduced Prime Farmland Alternative or the proposed Project would impose additional demands on peak and base period demands for electricity and other forms of energy. Both the Reduced Prime Farmland Alternative and the proposed Project would both create a new sources of renewable solar energy that would help the State of California meet its goals for use and production of alternative renewable energy sources. However, less renewable energy would be produced in association with the Reduced Prime Farmland Alternative resulting in a greater impact to the State's ability to meet its RPS compared to the proposed Project.

Both the Reduced Prime Farmland Alternative and the proposed Project would generate construction traffic that would require travel and associated transportation energy use. Despite the reduction in acreage of prime farmland, the number of construction, operational and decommissioning workers and equipment are not anticipated to decline substantially compared to the proposed Project. Construction energy expenditures would occur for a limited duration (e.g. 18-months for the Full Build-out Scenario) and would be minimized through implementation of standard mitigation measures identified to reduce amount of energy used for the projects (i.e. use of alternative fueled or catalyst equipped diesel construction equipment; minimize idling time; replace fossil-fueled equipment with electrically driven equivalents). Energy can also be saved through worker carpooling. Overall, transportation energy use is anticipated to be similar for both Reduced Prime Farmland Alternative and the proposed Project.

5.4.2 ALTERNATIVE 2 - NO PROJECT ALTERNATIVE

Alternative 2 is the No Project Alternative. Analysis of the No Project Alternative is required by CEQA Guidelines Section 15126.6(e)(1). The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the impacts of approving a proposed project with the impacts of not approving the proposed Project. This alternative considers the circumstance under which the Project does not proceed. This discussion analyzes the impacts of the No Project Alternative by projecting what can reasonably be expected to occur in the foreseeable future if the Project were not approved, as compared to the proposed Project. For the purposes of this analysis, the No Project Alternative assumes that the proposed Project would continue to remain as active agricultural land owned by the IID. The proposed 100 MW Drew Solar Project would not be developed and none of the applications associated with the project for a General Plan Amendment, Zone Change, Variance, CUPs, Parcel Map, Lot Tie Agreements and Developer Agreement would be submitted for approval to the County of Imperial and the Project site would retain its current land use designation and zoning. The Project site is currently designated "Agriculture" in the Imperial County General Plan and is currently zoned A-2 (General Agricultural Zone), A-2-R (General Agricultural Zone/Rural Zone), and A-3 (Heavy Agricultural) and could be developed consistent with the land use designation and zoning.

Characteristics

Under the No Project Alternative, the 100 MW Drew Solar Project would not be constructed. The proposed Project site would remain in its existing state as 762.8 net acres of agricultural land owned by the IID. Approval OF General Plan Amendment (GPA) (17#0006); Zone Change (ZC317-0007); Variance (V# 17-0003); FIVE CUPs (CUP#17-0031, CUP#17-0032, CUP#17-0033, CUP#17-0034, CUP#17-0035)to develop solar energy generating and energy storage systems; and one CUP#18-0001 to develop energy storage as

a component of solar on lands currently zoned A-2, A-2-R and A-3; Parcel Map (PM#02478); Lot Tie Agreement(s); and a Development Agreement would not be granted.

Instead, under the analysis of the No Project Alternative, the proposed Project site is assumed to remain in its existing condition as active farmland owned by the IID. In addition, the two Gen-Tie lines would not be constructed across Drew Road and SR-98 and no energy storage would be constructed on the Project site.

Relationship to Project Objectives

Implementation of the No Project Alternative would fail to fulfill the Project's objectives to develop the Drew Solar Project. Failure to construct the Project would forego development of a new source of renewable energy and forfeit locating a project of this size on previously disturbed land in a rural setting in proximity to the existing IID infrastructure (i.e. the Drew Switchyard). The Project site would remain in its existing state and would not support the Project's multiple objectives including: enabling better energy balancing and greater grid reliability through the development of energy storage facilities; reducing the likelihood of energy blackouts through the development of energy storage facilities; helping to meet the mandate of 1.3 gigawatts (GW) of energy storage established by Assembly Bill 2514. Therefore, the No Project Alternative would not achieve the objectives of the proposed Project. [Note: the full list of Objectives is provided in Chapter 2.0, Project Description].

Comparative Impacts

Aesthetics

Under the No Project Alternative, the aesthetic condition of the Project site would remain as it currently exists. Alteration of the site from farmland (typically used to grow Bermuda grass, Klein grass, etc.) to a solar energy generating facility with supporting structures including two Gen-Tie lines and supporting infrastructure would not occur.

The Project site is not located in a scenic vista nor does it contain any outstanding aesthetic features. No change in the existing visual quality of the Project site through introduction of a solar field and supporting infrastructure would occur under the No Project Alternative. Therefore, potential impacts related to a scenic vista, the existing visual character, light and glare and cumulative impacts would be less under the No Project Alternative compared to the proposed Project.

Land Use

The Project site has an existing General Plan land use designation of Agriculture and is currently zoned A-2 (General Agricultural Zone), A-2-R (General Agricultural Zone/Rural Zone), and A-3 (Heavy Agricultural). Solar energy electrical generators, electrical power generating plants, substations, and facilities for the transmission of electrical energy are allowed as conditional uses within these zones. The proposed Project requires approval of the following: General Plan Amendment (GPA#17-0006); Zone Change (ZC#17-0007); Variance (V#17-0003); five CUPs (CUP#17-0031, CUP#17-0032, CUP#17-0033, CUP#17-0034, CUP#17-0035) to develop solar energy generating and energy storage systems; and one CUP#18-0001 to develop energy storage as a component of solar on lands currently zoned A-2, A-2-R and A-3; Parcel Map (PM 02478); Lot Tie Agreement(s); and a Development Agreement.

Under the No Project Alternative, none of the above listed applications or Development Agreement would be required as the Project site would not be developed with a solar energy generating facility including two Gen-Tie lines and energy storage as a component of solar. This analysis assumes that the existing land use pattern would remain unchanged as approximately 762.8 acres of farmland owned by the IID. Overall, because the proposed Project requires a GPA, potential impacts associated with

applicable land use plans, policies and regulations would be less under the No Project Alternative compared to the proposed Project.

Transportation

Existing Year 2017 construction-related traffic impacts would not occur under the No Project Alternative. Increases in vehicle traffic related to operation and maintenance (Near-Term Year 2019 with Project, Long-Term (Year 2027) Conditions) of the Project would also not occur under the No Project Alternative. No major changes in traffic volumes or patterns would occur on SR 98 and no new access driveways would be constructed to the Project site would be constructed off of SR 98, Kubler Road, Drew Road or Pulliam Road. Damage to area roadways as a result of construction traffic would also be avoided. Therefore, potential impacts related to roadway Level of Service standards, hazardous design features and cumulative traffic impacts would be less under the No Project Alternative compared to the proposed Project.

Air Quality

Under the No Project Alternative, air pollutant emissions during both Project construction, operation and decommissioning would not occur. While the proposed Project would not obstruct an air quality plan, violate an air quality standard, or exceed a criteria pollutant threshold, all construction and decommissioning air quality emissions would be eliminated under the No Project Alternative. Therefore, potential impacts to air quality would be less under the Project site's existing condition as farmland under the No Project Alternative compared to construction of the proposed Project. However, operational air quality emissions associated with the proposed Project as solar energy generating facility would be less than the existing active farmland/agricultural operations on the Project site which typically generate air quality dust emissions. No sensitive receptors would be impacted and no objectionable odors would be generated by the No Project Alternative. Generation of dust or temporary objectionable odors associated with construction would be avoided under the No Project Alternative.

Overall, potential impacts related to air quality plans and standards, objectionable odors, sensitive receptors and cumulative impacts would be greater under the No Project Alternative compared to the proposed Project as farming operations would continue on the Project site.

Greenhouse Gases

Short-term construction-related greenhouse gas (GHG)/climate impacts would not occur under the No Project Alternative as no construction would take place on the Project site. Likewise, minimal operational GHG/climate change impacts resulting from operations and maintenance vehicle trips would not occur under the No Project Alternative. Compared to GHGs resulting from farming, operation of the proposed Project as a solar energy generating facility with no emissions would result in less GHG impacts compared to the proposed Project.

Geology and Soils

Under the No Project Alternative, a solar energy generating facility with energy storage as a component of solar, two Gen-Tie lines, and O&M buildings with septic systems would not be built within the Project site. Impacts associated with geologic hazards (i.e. exposure to Alquist-Priolo fault, seismic ground shaking, liquefaction, soil erosion, expansive soils, soil corrosivity) would be avoided as none of the proposed structures (i.e. PV panels, Gen-Tie lines, energy storage facilities, O&M buildings) would be developed. Potential to impact previously unknown paleontological resources would also be avoided under the No Project Alternative compared to the proposed Project. Therefore, geology and soils impacts (including impacts to previously unknown paleontological resources) would be less under the No Project Alternative compared to the proposed Project.

Overall, potential impacts related to exposure to an Alquist-Priolo fault, seismic ground shaking, liquefaction, soil erosion, expansive soils, soil corrosivity would be less under the No Project Alternative compared to the proposed Project.

Cultural Resources & Tribal Cultural Resources

Under the No Project Alternative, construction activities required to install the Project (i.e. solar panel footing installation, inverter pads, drilling for Gen-Tie poles, etc.) would not occur. Thus, the potential to impact historical resources, impact unanticipated archaeological resources, and previously unknown subsurface human remains or cause a substantial adverse change in the significance of a tribal cultural resource would be completely avoided.

Overall, potential impacts to cultural resources and tribal cultural resources would be less under the No Project Alternative than under the proposed Project.

Noise

Under the No Project Alternative, the site would remain in its current state as agricultural land, resulting in no change in the current ambient noise levels. Short-term construction-related noise impacts would not occur under the No Project Alternative. Similarly, without development of the proposed Project, long-term operational noise would be avoided. Therefore, noise impacts would be less under the No Project Alternative if the Project site remains in its current state as both construction and operational noise levels would be less compared to the proposed Project.

Agricultural Resources

For the analysis of the No Project Alternative, the Project site is assumed to remain in its existing condition as 768.2 net acres of farmland. No temporary conversion of agricultural land to a solar energy generating facility with supporting infrastructure would occur. Therefore, impacts to agricultural resources would be less under the No Project Alternative compared to the proposed Project which would temporarily convert agricultural land, including Prime Farmland, Farmland of Local Importance and Farmland of Statewide Importance to other non-agricultural uses.

Hazards and Hazardous Materials

Under the No Project Alternative, the proposed Project site is assumed to remain in its existing condition 762.8 acres of farmland. No hazardous materials would be transported to the site for use during construction, operation or decommissioning of the proposed Project. There is a potential for pesticides and herbicides to be released into IID drains under the No Project Alternative in association with continue farming. However, no reasonably foreseeable upset or release of hazardous materials would occur for the No Project Alternative as there are no Recognized Environmental Concerns on the Project site. Overall, potential impacts related to the transport, use, disposal and accidental release of hazardous materials; the upset or release of hazardous materials onsite; and cumulative impacts would be greater under the No Project Alternative compared to the proposed Project.

Hydrology and Water Quality

Implementation of the No Project Alternative would not result in any change to existing runoff rates or patterns. Without the introduction of a solar energy generating facility, no new pervious surfaces or structures would be developed on the Project site and groundwater would continue to be allowed to percolate uninhibited over the Project site. No detention basins would be constructed or needed as there would be no change in runoff patterns or quantities in association with the No Project Alternative as compared to the proposed Project. Under the No Project Alternative, erosion and siltation would be controlled in accordance with County standards including preparation, review and approval of a grading

plan by the County Engineer; compliance with Rule 800 and compliance with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. The proposed Project would maintain the existing drainage pattern and have detention basins. Less than significant impacts were identified with regard to runoff, interference with groundwater recharge, erosion and siltation, flooding or exceeding drainage capacity for the proposed Project. Overall, potential impacts related to hydrology and water quality would be less in association with continued agricultural use under the No Project Alternative compared to the proposed Project.

Biological Resources

Under the No Project Alternative, the proposed Project would not be developed and the Project site would remain in its existing condition as farmland. If the Project was not developed, impacts from implementation of the proposed Project to biological resources such as special status animals (e.g. Burrowing Owl, California Black Rail, Yuma's Ridgeway's Rail), riparian habitat (Arrow Weed Thicket and Cattail Marsh Alliance) and jurisdictional waters (IID drains) would be avoided. Therefore, impacts to biological resources would be less under the No Project Alternative if the Project site were to remain as 762 net acres of farmland. The Project site is not a viable wildlife corridor and the proposed Project would not impact habitat linkage. Overall, the No Project Alternative would have less impacts to biological resources compared to the Project site.

Public Services and Utilities

Under the No Project Alternative the Project site would not be developed with a solar energy generating facility with supporting infrastructure including two Gen-Tie lines, energy storage and O&M Buildings. If the Project site is allowed to remain in its existing condition as farmland, demand for ICFD and ISCO services would remain unchanged; no on-site water or wastewater treatment facilities would be constructed; no construction or operational water would be needed; no solid waste pick-up or disposal would be necessary; no service from IID would be needed to operate the O&M building(s) and keep inverters warm during the evening hours; and no internet or telephone service would be necessary. In addition, 100 MW of renewable energy would not be generated by the Project and distributed to the California electricity grid. Therefore, impacts related to public services and utilities would be less if the proposed Project continues in its present condition as farmland under the No Project Alternative as compared to the proposed Project. While overall, potential impacts to fire protection, law enforcement services, water treatment, water supply, wastewater, solid waste service and landfill capacity, and electrical service would be less under the No Project Alternative compared to the proposed Project, the No Project Alternative would result in greater water demand than would occur under the No Project Alternative. Likewise, generation of 100 MW of renewable energy would not occur.

Energy

Under the No Project Alternative the Project site would not be developed with a solar energy generating facility with supporting infrastructure including two Gen-Tie lines, energy storage and O&M Buildings. No energy resources would be expended on construction as the site would remain in agricultural production. Existing energy use needed to farm the site would still occur but the No Project Alternative would not impose additional demands on local and regional energy supplies or peak and base period demands for electricity and other forms of energy. By maintaining existing farming operations on the Project site, the No Project Alternative would forego development of 100 MW of renewable energy generation and energy storage thereby not assisting the State with meeting its RPS and increasing renewable energy sources. Therefore, the No Project Alternative would result in greater impacts than the proposed Project with regard to compliance with existing energy standards and effects on energy sources. Transportation energy usage associated with existing farming operations would be the same for the No Project. Overall, energy

impacts of the No Project would be greater than the proposed Project because the No Project Alternative would forego the development of 100 MW of renewable energy which would contribute to the electricity needs and help the State meet its goals for use and production of alternative renewable energy standards.

5.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Based upon the evaluation described in this section, the No Project Alternative (Alternative 2) is considered to be the environmentally superior alternative as it would avoid all adverse impacts associated with the proposed Project. The No Project Alternative was determined to have less adverse environmental impacts than the proposed Project on most issues overall assuming that the site remains in its existing condition as farmland.

Under CEQA Guidelines Section 15126.6 (e)(2), if the environmentally superior alternative is the No Project Alternative, another environmentally superior alternative must be selected from the other alternatives analyzed. After the No Project Alternative, the alternative with the least potential impacts would be the Reduced Prime Farmland Alternative. When compared to the proposed Project, the Reduced Prime Farmland Alternative resulted in the majority of impacts being similar to or less severe than the impacts that would occur in association with implementation of the proposed Project. However, impacts would be greater in association with the Reduced Prime Farmland Alternative compared to the proposed Project with regard to energy. Specifically, the Reduced Prime Farmland Alternative would forego developing approximately 39.5 acres with solar facilities that would contribute to the State's renewable energy supply and beneficially contribute to IID local energy supplies. Therefore, the Reduced Prime Farmland Alternative would be the environmentally superior alternative overall with the exception of renewable energy generation.

Table 5.0-1, below, provides a summary of the potential impacts of the alternatives evaluated in this section, as compared with the potential impacts of the proposed Project.

TABLE 5.0-1 COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT BY RESOURCE/IMPACT	REDUCED PRIME FARMLAND ALTERNATIVE	NO PROJECT ALTERNATIVE
AESTHETICS		
Impact 4.1.1 – Adverse Effect on Scenic Vista	L	L
Impact 4.1.2 – Degrade Existing Visual Character or Quality of the Site and its Surroundings	L	L
Impact 4.1.3 – New Source of Substantial Light or Glare	L	L
Impact 4.1.4 – Cumulative Visual and Light and Glare Impacts	L	L
LAND USE		
Impact 4.2.1 – Cause a Significant Environmental Impact due to a Conflict with Any Land Use Plan, Policy, or Regulation	S	L
Impact 4.2.2 – Cumulative Conflicts with Applicable Land Use Plans, Policies, or Regulations	S	L
TRANSPORTATION		
Impact 4.3.1 – Conflict with Applicable Plan – Existing Year 2017 Plus Project Construction Conditions	S	L
Impact 4.3.2 – Conflict with Applicable Plan – Near-Term (Year 2019) With Project	S	L
Impact 4.3.3 – Conflict with Applicable Plan – Long-Term (Year 2027) Conditions	S	L
Impact 4.3.4 – Increase Hazards Due to a Geometric Design Feature – Driveways and Travel Speeds	S	L
Impact 4.3.5 – Increase Hazards Due to a Geometric Design Feature – Damage to County-Maintained Roadways During Project Construction	S	L
Impact 4.3.6 – Emergency Access	S	L
Impact 4.3.7 – Cumulative Impacts to Intersection, Roadway and Freeway Segment LOS – Existing (Year 2017) With Project Construction With Cumulative Conditions	S	L
Impact 4.3.8 – Cumulative Impacts to Intersection, Roadway and Freeway Segment LOS - Near-Term (Year 2019) With Project Construction With Cumulative Conditions	S	L
Impact 4.3.9 – Cumulative Impacts to Intersection, Roadway and Freeway Segment LOS – Long-Term (Year 2027) With Project Construction With Cumulative Conditions	S	L
Impact 4.3.10 – Cumulative Increase Hazards Due to a Geometric Design Feature	S	L
Impact 4.3.11 – Cumulative Increases in Hazards Due to a Geometric Design Feature – Damage to County-Maintained Roadways During Project Construction	S	L

TABLE 5.0-1 COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT BY RESOURCE/IMPACT	REDUCED PRIME FARMLAND ALTERNATIVE	NO PROJECT ALTERNATIVE
AIR QUALITY		
Impact 4.4.1 – Conflict with or Obstruct Implementation of an Applicable Air Quality Plan	L	G
Impact 4.4.2 – Result in a Cumulatively Considerable Net Increase of any Criteria Pollutant	L	G
Impact 4.4.3 – Exposure of Sensitive Receptors to Substantial Pollutant Concentrations	L	L
Impact 4.4.4 – Result in Emissions Affecting a Substantial Number of People	L	L
Impact 4.4.5 – Cumulative Air Quality Impacts – Violate Air Quality Standard/Cause Air Quality Violation	L	L
GREENHOUSE GASES		
Impact 4.5.1 – Generation of Greenhouse Gas Emissions	S	G
Impact 4.5.2 – Conflict with an Applicable Plan, Policy, or Regulation Adopted to Reduce Greenhouse Gas Emissions	S	G
GEOLOGY AND SOILS		
Impact 4.6.1 – Alquist-Priolo Earthquake Fault Rupture	L	L
Impact 4.6.2 – Strong Seismic Ground Shaking	L	L
Impact 4.6.3 – Liquefaction	S	L
Impact 4.6.4 – Soil Erosion	L	L
Impact 4.6.5 – Expansive Soils	S	L
Impact 4.6.6 – Soil Capability to Support On-site Wastewater Treatment System	S	L
Impact 4.6.7 – Soil Corrosivity	S	L
Impact 4.6.8 – Impacts to Paleontological Resources	L	L
Impact 4.6.9 – Cumulative Exposure to Geologic and Seismic Impacts	L	L
Impact 4.6.10 – Cumulative Impacts to Paleontological Resources	L	L

TABLE 5.0-1 COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT BY RESOURCE/IMPACT	REDUCED PRIME FARMLAND ALTERNATIVE	NO PROJECT ALTERNATIVE
CULTURAL RESOURCES & TRIBAL CULTURAL RESOURCES		
Impact 4.7.1 – Impacts to Historical Resources	**L**	**L**
Impact 4.7.2 – Impacts to Unanticipated Archaeological Resources	**L**	**L**
Impact 4.7.3 – Impacts to Previously Unknown Subsurface Human Remains	**L**	**L**
Impact 4.7.4 – Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource	**L**	**L**
Impact 4.7.5 – Cumulative Impacts to Historic and Archaeological Resources, Human Remains and Tribal Cultural Resources	**L**	**L**
NOISE		
Impact 4.8.1 – Substantial Temporary or Permanent Noise Increase in Excess of Standards	**L**	**L**
Impact 4.8.2 – Groundborne Vibration or Groundborne Noise Level Impacts	**L**	**L**
Impact 4.8.3 – Cumulative Noise Increases/Groundborne Vibration	**L**	**L**
Impact 4.8.4 – Cumulative Noise Increases	**L**	**L**
AGRICULTURAL RESOURCES		
Impact 4.9.1 – Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance	**L**	**L**
Impact 4.9.2 – Indirect Environmental Effects of Conversion of Farmland	**L**	**L**
Impact 4.9.3 – Cumulative Agricultural Resources Impacts	**L**	**L**
HAZARDS AND HAZARDOUS MATERIALS		
Impact 4.10.1 – Hazardous Materials Transport, Use, Disposal and Accidental Release	**S**	**L**
Impact 4.10.2 – Hazard Through Upset/Release of Hazardous Materials	**S**	**L**
Impact 4.10.3 – Cumulative Hazards and Hazardous Materials Impact	**S**	**L**

TABLE 5.0-1 COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT BY RESOURCE/IMPACT	REDUCED PRIME FARMLAND ALTERNATIVE	NO PROJECT ALTERNATIVE
HYDROLOGY AND WATER QUALITY		
Impact 4.11.1 – Violate Water Quality Standards or Waste Discharge Requirements	S	L
Impact 4.11.2 – Result in Depleted Groundwater Supplies or Interfere Substantially with Groundwater Recharge	S	L
Impact 4.11.3 – Result in Substantial Erosion or Siltation On- or Off-site	S	L
Impact 4.11.4 – Alteration of Drainage Pattern Substantially Increasing Surface Runoff/ Construction of Stormwater Drainage	S	L
Impact 4.11.5 – Create or Contribute Runoff Exceeding Capacity/ Provide Substantial Sources of Polluted Runoff	S	L
Impact 4.11.6 – Cumulative Water Quality and Runoff Impacts	S	L
BIOLOGICAL RESOURCES		
Impact 4.12.1 – Impacts to Special Status Species (Burrowing Owl)	S	L
Impact 4.12.2 – Impacts to Special Status Species (California Black Rail and Yuma Ridgeway's Rail)	S	L
Impact 4.12.3 – Impacts on Riparian Habitat or other Sensitive Natural Community (Arrow Weed Thicket and Cattail Marsh Alliance)	S	L
Impact 4.12.4 – Impacts on Wetlands/Jurisdictional Resources	S	L
Impact 4.12.5 – Impacts to Wildlife Corridors/Habitat Linkage	S	L
Impact 4.12.6 – Cumulative Impacts to Biological Resources	S	L
PUBLIC SERVICES AND UTILITIES		
Impact 4.13.1 – Impacts to ICFD Services	S	L
Impact 4.13.2 – Impacts to ICFD Accessibility	S	L
Impact 4.13.3 – Cumulative Impacts to ICFD Fire Protection and Emergency Response	S	L

TABLE 5.0-1 COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT BY RESOURCE/IMPACT	REDUCED PRIME FARMLAND ALTERNATIVE	NO PROJECT ALTERNATIVE
Impact 4.13.4 – Impacts to ICSO Services	**S**	**L**
Impact 4.13.5 – Cumulative Impacts to ICSO Services	**S**	**L**
Impact 4.13.6 – Construction of New Water Facilities	**L**	**L**
Impact 4.13.7 – Water Supply Sufficiency	**L**	**G**
Impact 4.13.8 – Cumulative Water Supply Impacts	**L**	**G**
Impact 4.13.9 – Construction of New Wastewater Treatment and Wastewater Treatment Infrastructure	**L**	**L**
Impact 4.13.10 – Cumulative Wastewater Impacts	**L**	**L**
Impact 4.13.11 – Generate Solid Waste in Excess of Standards or in Excess of Capacity of Local Infrastructure/Comply with Statutes and Regulations Related to Solid Waste	**L**	**L**
Impact 4.13.12 – Cumulative Impacts to Solid Waste in Excess of Standards or in Excess of Capacity of Local Infrastructure/Comply with Statutes and Regulations Related to Solid Waste	**L**	**L**
Impact 4.13.13 – Relocation or Construction of New or Expanded Electric Power Facilities	**L**	**L**
Impact 4.13.14 – Cumulative Impacts to Electric Service	**L**	**L**
Impact 4.13.15 – Impacts to Telecommunications Facilities	**S**	**L**
Impact 4.13.16 – Cumulative Impacts to Telecommunications Facilities	**S**	**L**
ENERGY		
Impact 4.14.1 – Use of Energy Resources During Project Construction and Operation	**S**	**L**
Impact 4.14.2 – Consumption of Energy - Effects on Local and Regional Energy Supplies	**S**	**L**
Impact 4.14.3 – Consumption of Energy - Effects on Peak and Base Period Demands	**L**	**L**
Impact 4.14.4 – Conflict with or Obstruct State or Local Plan - Compliance with Existing Energy Standards	**G**	**G**
Impact 4.14.5 – Energy Consumption - Effects on Energy Sources	**S**	**G**
Impact 4.14.6 – Energy Consumption - Transportation Energy Use	**L**	**L**

Notes: S = Similar Impact compared to the Proposed Project

L = Less Impact compared to the Proposed Project

G = Greater Impact compared to the Proposed Project.