SECTION 4.13
PUBLIC SERVICES AND UTILITIES

This section discusses public services and utilities that would serve each CUP as well as the Full Build-out Scenario. Public services include fire protection and law enforcement. Public utilities include water service, wastewater service, solid waste, electricity, and telephone/internet. Each service is described with regard to existing resources available and potential impacts on each service or utility providers' ability to adequately respond to and serve the proposed Full Build-out Scenario, as well each of the 17 individual CUPs, and whether such service would require an expansion of public facilities that would generate a new significant environmental impact.

4.13.1 FIRE PROTECTION

The following discussion pertains to impacts to fire protection with regard to the Imperial County Fire Department (ICFD). Hazards such as electro-magnetic fields (EMFs) and fire safety hazards associated with the proposed gen-tie are discussed in Section 4.10, Hazards and Hazardous Materials.

4.13.1.1 REGULATORY FRAMEWORK

A. STATE

Fire Codes and Guidelines

The 2007 California Fire Code (CFC; Title 24, Part 9 of the California Code of Regulations [CCR]) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The CFC also establishes requirements intended to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of the CFC apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout the State of California. The CFC includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas (PMC 2011).

The County of Imperial has adopted the CFC with amendments specific to Imperial County.

B. LOCAL

Imperial County Year 2006 Development Impact Fees Ordinance No. 1418

The Year 2006 Development Impact Fees Ordinance was enacted to address policies regarding New Development in both the Countywide and Unincorporated Areas of Imperial County. The policies require New Developments to supplement the fair share of the costs of public facilities, equipment and services that they necessitate, including public services such as those provided by the Imperial County Fire Department (ICFD). The ICFD serves residential and non-residential development in the unincorporated areas of the County. All Development Impact Fees are addressed based on the demand for services.

Imperial County General Plan

The Seismic and Public Safety Element of the Imperial County General Plan includes goals, objectives, policies and programs for land use planning, public safety, emergency preparedness and the control of hazardous materials. In addition, the Circulation and Scenic Highway Element includes a goal and objective regarding emergency access. **Table 4.13-1** provides a consistency analysis of the applicable Imperial County General Plan goals and objectives relative to the proposed Project. While this EIR analyzes the Project's consistency with the General Plan pursuant to CEQA Guidelines section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

TABLE 4.13-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS - FIRE PROTECTION

General Plan Goals and Objectives	Consistent with General Plan?	Analysis
SEISMIC/PUBLIC SAFETY ELEMENT		
Land Use Planning and Public Safety		
Goal 1 Include public health and safety considerations in land use planning.	Yes	The proposed Project is a solar energy center located on parcels designated for "Agricultural" uses and zoned either A-2 (Agricultural General), A-2-R (General Agricultural Rural Zone), or A-3 (Heavy Agriculture). Solar energy electrical generators, electrical power generating plants, substations, and facilities for the transmission of electrical energy are allowed in Agricultural zones with a conditional use permit (CUP). The Applicant has applied for 17 CUPs for the 32 solar field site parcels to be developed as a solar energy center. A Fire Prevention and Response Plan (FPRP) would be developed and implemented during construction, operation and maintenance of the Project. The plan would identify materials that are potential fire hazards, specify property handling and storage procedures, describe good housekeeping procedures, etc. associated with fire prevention and response. The Project would comply with all applicable health and safety considerations including provision of emergency access and fire water. Therefore, the proposed Project is consistent with this goal.
Objective 1.8 Reduce fire hazards by the design of new developments.	Yes	The proposed Project would be designed to incorporate fire safety features including fire alarms on buildings and use of nonflammable materials. The FPRP would also serve to reduce fire hazards. In addition, the ICFD would review all plans prior to Project approval for compliance with applicable CFC and local standards. Therefore, the proposed Project is consistent with this objective.

TABLE 4.13-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS - FIRE PROTECTION

General Plan Goals and Objectives	Consistent with General Plan?	Analysis
Emergency Preparedness		
Goal 2 Minimize potential hazards to public health, safety, and welfare and prevent the loss of life and damage to health and property resulting from both natural and human-related phenomena.	Yes	The proposed Project plans identify multiple access points for each CUP (Figure 2.0-5 thru Figure 2.0-22). The ICFD has been contacted for input on the proposed Project to address any potential fire or emergency access hazards. The Project would be required to comply with all state and local fire codes and ordinances. Therefore, the Project is consistent with this goal.
Objective 2.8 Prevent and reduce death, injuries, property damage, and economic and social dislocation resulting from natural hazards including flooding, land subsidence, earthquakes, other geologic phenomena, levee or dam failure, urban and wildland fires and building collapse by appropriate planning and emergency measures.	Yes	The solar field site parcels are located in a portion of the County characterized by rural industrial uses. According to the Imperial County Natural Hazard Disclosure (Fire) Map prepared by the California Department of Forestry and Fire Protection (2000), none of the solar field site parcels fall within an area characterized as either: (1) a wildland area that may contain substantial forest fire risk and hazard; or (2) a very high fire hazard severity zone. As a result, the Project area is neither within a fire hazard zone nor are any of the CUP areas subject to risk of forest fires. Therefore, the proposed Project is consistent with this objective.
Objective 2.5 Minimize injury, loss of life, and damage to property by implementing all state codes where applicable.	Yes	The proposed Project would be required to comply with all applicable state and local codes regarding the operation of a solar generation facility. Therefore, the proposed Project would be consistent with this objective.
CIRCULATION AND SCENIC HIGHWAY ELEMENT		
Safe, Convenient, and Efficient Transportation System		
Goal 1 The County will provide and require an integrated transportation system for the safe and efficient movement of people and goods within and through the County of Imperial with minimum disruption to the environment.	Yes	Multiple County maintained roads provide access throughout the Project area and to each CUP. Access to the Project area would primarily be via the following paved roads: County Highway S30, Anza Road, Kubler Road, Lyons Road, and SR-98. The Project does not include any features that would restrict access to nearby properties.

TABLE 4.13-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS - FIRE PROTECTION

General Plan Goals and Objectives	Consistent with General Plan?	Analysis
		Therefore, the proposed Project is consistent with this Goal. Refer to Section 4.3, Transportation and Circulation, for a full discussion of transportation and access.
Objective 1.17 Assure that road systems are adequate to accommodate emergency situations and evacuation plans.	Yes	The final site plan for each CUP and the Full Build-out Scenario would be designed, developed and implemented in consultation with the ICFD and would include an FPRP in accordance with ICFD requirements for access. Therefore, the proposed Project is consistent with this objective.

4.13.1.2 EXISTING SETTING

The ICFD serves a portion of the approximately 4,597 square miles of Imperial County. The ICFD has seven fire stations and five contract-based fire departments that serve Imperial County (Rouhotas 2013). The seven stations include Station #1 in Imperial; Station #2 in Heber; Station #3 in Seeley; Station #4 in the City of Imperial; Station #5 in Palo Verde, Station #6 in Ocotillo; and Station #7 in Niland.

The proposed Project would be served by Station #2 located at 1078 Dogwood Road in the 250 square-mile unincorporated township of Heber. The ICFD estimates response times to the solar field site parcels would be approximately 10 minutes to reach the eastern parcels and approximately 15 minutes to reach the far western parcels (Horn 2014). Station #2 is operated with a minimum of three full-time staff at all times: a Captain, Fire Fighter and Reserve (Horn 2014). Station #2 also provides a variety of emergency services to the area, including Emergency Medical Technicians (EMT) and paramedic services (Rouhotas 2013). The ICFD is the first responder for emergency services for medical emergencies, including traffic accidents, to the Heber area. In addition, Station #2 would provide fire prevention services (e.g. inspection of water tanks and sprinklers) to solar field site parcels during construction and the CUPs operations. During operations, the ICFD is required to send personnel to inspect each CUP once per year (Horn 2014).

The ICFD does not have established response time goals in remote County areas (Rouhotas 2013). The proposed Project is in a rural industrial area and does not have a required response time. However, the ICFD responds as quickly and efficiently to any incident as requested (Rouhotas 2013).

4.13.1.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the CEQA Guidelines Appendix G thresholds of significance. The Project would have a significant impact to fire protection services if it would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered fire facilities, need for new or physically altered fire facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection.

B. METHODOLOGY

Evaluation of potential impacts to fire service associated with construction, operation and maintenance, and decommissioning the proposed Project was based on consultation with ICFD staff, review of information provided by the Applicant, and Applicant proposed Best Management Practices and Design Features (refer to **Table 2.0-9** in Chapter 2.0, Project Description). Impacts associated with provision of water pressure to support fire flow are addressed under the discussion of water supply in subsection 4.13.3, below.

C. PROJECT IMPACTS AND MITIGATION MEASURES

Impacts to ICFD Services

Impact 4.13.1 The proposed Project would develop a solar energy generation facility on agricultural land in Imperial County. The location of the Project and the potential for development of individual CUPs over time could result in increased demand on the ICFD services. However, the Project would not cause a need to expand ICFD's public facilities. Therefore, impacts to ICFD services are **less than significant**. Additionally, the proposed Project has been designed to incorporate fire safety features and would contribute to the agency to offset any costs associated with the Project.

FULL BUILD-OUT SCENARIO/ ALL CUPS (13-0036 THRU 13-0052)

Construction

The proposed Project involves construction of up to 17 individual CUPs on 32 parcels totaling approximately 2,793 acres. The Project is located approximately 10 minutes from the nearest Imperial County fire station which is located in the Township of Heber (Rouhotas 2013). Potential fire hazards associated with construction are low and would primarily be associated with sparks from equipment igniting dry vegetation or refueling or maintaining equipment. However, the solar field site parcels would be cleared of all vegetation and all hazardous materials (including gasoline, diesel fuel and oil) would be required to be properly handled thereby reducing potential for fire in association with use of these materials. Installation of solar panels and equipment are not anticipated to create a fire hazard. Therefore, impacts associated with impacts to ICFD services are considered **less than significant** for both the Full Build-out Scenario and the Phased CUP Scenario.

Operation

Several Project components have the potential to be flammable. Transformers, inverters, power lines, and the O&M building(s) have the potential to catch on fire. The PCS structures which house the inverters and transformers will have fire extinguishers and fire alarms which are remotely monitored.

The proposed Project has been designed to incorporate fire prevention features such as utilizing PV modules and ancillary equipment made of fire-resistant material; implementing a vegetation management plan; locating buildings away from combustible items; applying emergency preparedness through fire alarms and a 10,000 gallon water tank for fire protection; and preparing and implementing a FPRP in accordance with ICFD requirements. The plan would identify materials that are potential fire hazards, specify property handling and storage procedures, describe good housekeeping procedures,

etc. associated with fire prevention and response. In addition, the ICFD would have access to each CUP site via knox locks (Ferrara 2013e). These features will minimize risk of fire and the potential need for ICFD services, and thus, represent a limited increase in the need for fire services to each CUP.

Overall, the facility will be designed and constructed in accordance with the 2013 CBC, General Order 95 and the National Electrical Safety Code along with other applicable industry standards. These industry standards ensure adequate service and secure safety to persons engaged in the construction, maintenance, operation or use of the facilities and to the general public. The intensity of people on-site during operations would be less than the number during construction and would include approximately 15 full-time personnel per CUP during operations and maintenance crew (WRS 2014).

In compliance with applicable regulations, the proposed Project would take precautions for fire prevention including: maintenance of personal protective equipment and emergency equipment (spill containment kits, fire extinguishers, and other firefighting equipment), storage and appropriate labeling of flammable and combustible liquids, and routine weed abatement and landscape maintenance.

Additionally, the ICFD assesses fire impact fees for solar projects to mitigate costs in the event that services are needed (Rouhotas 2013). Finally, despite its increase in demand for ICFD's services, the Project will not cause ICFD to expand its public facilities. Therefore, for construction, operations, and maintenance, the impacts associated with increased demand for ICFD services are considered **less than significant** when considering the Full Build-out Scenario as well as each of the 17 individual CUPs.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the solar field site parcels would be restored to pre-Project soil conditions. Decommissioning involves activities similar to construction, but would occur over a shorter period of time with less intense volumes of traffic. Moreover, the Project would be decommissioned in accordance with the California Building Code, General Order 95 and the National Electrical Safety Code along with other applicable industry standards. These industry standards ensure adequate service and secure safety to persons engaged in the decommissioning of the facilities.

Further, emergency equipment, such as a 10,000 gallon tank are required to accompany O&M buildings for the life of the Project (Horn 2014). As such, fire prevention and emergency preparedness will continue through decommissioning and emergency equipment would remain on-site until demolished.

Finally, despite its increase in demand for ICFD's services, the Project will not cause ICFD to expand its public facilities. Thus, during decommissioning of the Project, impacts to ICFD Services would be anticipated to be **less than significant** when considering the Full Build-out Scenario as well as each of the 17 individual CUPs.

Although Project construction, operation, maintenance, and decommissioning do not have a significant environmental impact because they do not require the construction of a new fire substation, the socio-economic impacts to service levels are a public policy matter for the County. Therefore, the County has performed an economic and fiscal impact analysis and determined that the fiscal revenue from the project to the County alone will exceed costs associated with the County providing government services to the site by $1.3 million over the operational term of each CUP or 30 years, whichever is later.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

Impacts to ICFD Accessibility

Impact 4.13.2 The proposed Project is designed to include a Fire Prevention and Response Plan (FPRP) providing ICFD-approved access points. As such, impacts to ICFD accessibility are considered **less than significant**.

FULL BUILD-OUT SCENARIO/ALL CUPS (13-0036 THRU 13-0052)

Construction/Operation

The proposed Project involves construction of up to 17 individual CUPs developed as solar projects on 32 parcels totaling approximately 2,793 acres. Portions of the Project area (central CUP cluster and southern CUP cluster) are in close proximity and adjacent to SR-98 while the northern CUP cluster is approximately 2.5 miles south of Interstate 8 (I-8).

Multiple County maintained roads provide access throughout the Project area. Access to the CUPs would be primarily via the following paved roads: County Highway S30, Anza Road, Kubler Road, Lyons Road, and SR-98. Additionally, the Project may use County maintained unpaved roads when access from existing paved roads or roads internal to the Project boundary is unavailable. These unpaved roads would include Wahl Road, Mandrapa Road, Ferrell Road, George Road, Preston Road, and Rockwood Road. The Project would not restrict access to nearby properties (WRS 2014).

Per ICFD standards, there are two points of access to each CUP. Access locations shown in Figures 2.0-6 through 2.0-22 (provided in Chapter 2.0, Project Description) were based on discussions with the ICFD and previous engineering work other solar power plants within Imperial County. To serve existing solar projects, the ICFD requested that an all-wheel drive fire truck be purchased. The ISECS project provided the funds to pay for this truck and is currently being reimbursed by other solar developers (Ferrara 2014e).

The Project proposes access points at each of the 17 individual CUPs as follows:

CUP 13-0036

Two primary and secondary access points are proposed to CUP 13-0036. One primary and secondary access would be off of SR-98 west of Rockwood Road; the other primary and secondary access points would be off of Rockwood Road. Therefore, impacts to ICFD access to CUP 13-0036 are considered **less than significant.**

CUP 13-0037

Two primary and secondary access points are proposed to CUP 13-0037. Both primary access points are proposed off of Rockwood Road along the western boundary of the CUP area. One secondary access is proposed from the north off of the unnamed dirt farm road and the other is from the west off of Rockwood Road. The ICFD has an off-road fire truck available to drive on dirt roads to access the site if necessary. Therefore, impacts to ICFD access to CUP 13-0037 are considered **less than significant.**

CUP 13-0038

Two primary and one secondary access points are proposed to CUP 13-0038. The two primary access roads are proposed off of the unnamed dirt farm roads on the east and west of the CUP area. The secondary access point is from the unnamed dirt farm road on the west. The ICFD has an off-road fire truck available to drive on dirt roads to access the site if necessary. Therefore, impacts to ICFD access to CUP 13-0038 are considered **less than significant.**

CUP 13-0039

One primary and one secondary point of access is proposed to CUP 13-0039. The primary access would be off of the unnamed dirt farm road on the west near the southwestern corner of the CUP. The ICFD has an off-road fire truck available to drive on dirt roads to access the site from the primary access. In addition, a secondary access is proposed along George Road near the northeast corner of the CUP. Therefore, impacts to ICFD access to CUP 13-0039 are considered **less than significant.**

CUP 13-0040

One primary and one secondary point of access are proposed to CUP 13-0040. Both would be from the north off of Preston Road. Therefore, impacts to ICFD access to CUP 13-0040 are considered **less than significant**.

CUP 13-0041

One primary and one secondary point of access are proposed to CUP 13-0041. Both would be from the north off of Preston Road. Therefore, impacts to ICFD access to CUP 13-0041 are considered **less than significant.**

CUP 13-0042

Three primary and three secondary access points are proposed to CUP 13-0042. Two of the primary and secondary access points are proposed off of the unnamed dirt farm road that aligns east-west through the western portion of the CUP area. The access points would be to the north and south off of this road. In addition, a primary and secondary access would extend to the west off of Brockman Road into the western-most portion of the CUP area west of Brockman Road. The ICFD has an off-road fire truck available to drive on dirt roads to access the site if necessary. Therefore, impacts to ICFD access to CUP 13-0042 are considered **less than significant.**

CUP 13-0043

One primary and secondary point of access are proposed to CUP 13-0043 off of Lyons Road on the north. Therefore, impacts to ICFD access to CUP 13-0043 are considered **less than significant.**

CUP 13-0044

One primary and secondary point of access are proposed to CUP 13-0044. Both would be from the east off of Rockwood Road. Therefore, impacts to ICFD access to CUP 13-0044 are considered **less than significant.**

CUP 13-0045

One primary and one secondary point of access are proposed to CUP 13-0045. Both would be from the north off of Lyons Road. Therefore, impacts to ICFD access to CUP 13-0045 are considered **less than significant.**

CUP 13-0046

One primary and secondary point of access are proposed to CUP 13-0046. The primary access would be off of Rockwood Road on the west, and the secondary point of access would be from Lyons Road on the south. Therefore, impacts to ICFD access to CUP 13-0046 are considered **less than significant.**

CUP 13-0047

One primary and one secondary point of access are proposed to CUP 13-0047. Both would be from the south off of Wahl Road. Therefore, impacts to ICFD access to CUP 13-0047 are considered **less than significant.**

CUP 13-0048

One primary and one secondary point of access are proposed to CUP 13-0048. The primary access would be off of Rockwood Road on the east and the secondary access is proposed off of Wahl Road on the north. Therefore, impacts to ICFD access to CUP 13-0048 are considered **less than significant.**

CUP 13-0049

One primary and one secondary point of access are proposed to CUP 13-0049. Both would be from the west off of Brockman Road. Therefore, impacts to ICFD access to CUP 13-0049 are considered **less than significant.**

CUP 13-0050

One primary and secondary point of access are proposed to CUP 13-0050. The primary and secondary access would be from the north off of Anza Road near the eastern and western boundaries of the CUP. Therefore, impacts to ICFD access to CUP 13-0050 are considered **less than significant.**

CUP 13-0051

One primary and secondary point of access are proposed to CUP 13-0051. The primary and secondary access would be from the north off of Anza Road on the east and west side of the CUP. Therefore, impacts to ICFD access to CUP 13-0051 are considered **less than significant.**

CUP 13-0052

One primary and one secondary point of access are proposed to CUP 13-0052. The primary and secondary access would be from the north off of Anza Road near the eastern and western boundaries of the CUP. Therefore, impacts to ICFD access to CUP 13-0052 are considered **less than significant.**

The Applicant proposed Measures/Project Design Features address accessibility to each CUP through the development and implementation of the FPRP, identifying locations of access, gate and road widths, existing paved roads, secondary unpaved roads, and non-restrictive access to nearby properties. The Project will not cause ICFD to expand its public facilities. Therefore, impacts to ICFD access are **less than significant** for the both the Full Build-out Scenario and each individual CUP (13-0036 thru 13-0052) proposed as part of the Phased CUP Scenario.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP areas would be restored to pre-Project soil conditions. The FPRP requires ICFD-approved access points and required road and gate widths through the life of the Project. As such, the FPRP requirements will remain through the decommissioning process. Thus, during Project decommissioning, impacts to ICFD accessibility are **less than significant** for both the Full Build-out Scenario as well as each individual CUP (13-0036 thru 13-0052) proposed as part of the Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

4.13.1.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The cumulative setting for fire protection is the service area of the ICFD. For emergency fire response, the proposed Project would be served by Imperial County Fire Station #2.

A cumulative list of large scale proposed, approved and reasonably foreseeable renewable energy projects within Imperial County, is shown in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions Used. Projects identified within Imperial County that are in the vicinity of the proposed solar field site parcels include: Centinela Solar, ISECS, and the Mount Signal and Calexico Solar Farms. Each of these projects is a photovoltaic solar facility either proposed, currently under construction, or in operation.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to ICFD Fire Protection and Emergency Response

Impact 4.13.3 Development of the proposed Project, in combination with proposed, approved and reasonably foreseeable projects in the ICFD service area, would increase demand for fire protection and emergency medical response. However, each individual project would be required to incorporate fire safety features, adequate access, and worker safety protocols in compliance with all applicable fire and occupational safety standards and codes. The projects will not cause ICFD to expand its public facilities. Therefore, cumulative impacts to fire protection and emergency response are considered less **than cumulatively considerable.**

FULL BUILD-OUT SCENARIO/ALL CUPS (13-0036 THRU 13-0052)

Construction, Operation, and Decommissioning

The proposed Project, in combination with other proposed, approved and reasonably foreseeable projects, as identified in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions Used, would increase demand on existing fire facilities, equipment, and staffing in the ICFD service area. A number of projects are within the vicinity of the proposed solar field site parcels. However, neither the proposed Project nor the other projects identified as part of cumulative conditions would result in the development of, or need for, additional residential development, structures, or population requiring ICFD fire protection and emergency response. The projects will not cause ICFD to expand its public facilities.

All new development in Imperial County is subject to fire safety standards, including state and local regulations. Furthermore, impacts to fire protection are mitigated on a project-by-project basis through review of individual projects by the ICFD to ensure that all fire safety requirements, including adequate access, are satisfied. Thus, the Project's contribution (whether implemented as the Full Build-out Scenario or the Phased CUP Scenario), to cumulative impacts to fire protection and emergency medical response would be **less than cumulatively considerable**. Likewise, because individual projects are required to meet federal, state and local requirements, as applicable, cumulative project impacts to fire protection and emergency response would be **less than cumulatively considerable** when considering both the Full Build-out Scenario as well as each of the 17 CUPs (i.e. the Phased CUP Scenario).

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

4.13.2 LAW ENFORCEMENT

4.13.2.1 REGULATORY FRAMEWORK

A. LOCAL

Imperial County Year 2006 Development Impact Fees Ordinance No. 1418

The Year 2006 Development Impact Fees Ordinance was enacted to address policies regarding New Development in both the Countywide and Unincorporated Areas of Imperial County. The policies require New Developments to supplement the fair share of the costs of public facilities, equipment and services that individual development necessitates, including public services such as those provided by the Imperial County Sheriff's Office (ICSO). The ICSO provides services to both the Countywide and Unincorporated areas of the County. The ICSO provides police services to the unincorporated areas, while also operating the county jail and coroner's office in both unincorporated and incorporated areas of the County. All Development Impact Fees are addressed based on the demand for services.

Imperial County General Plan

The Imperial County General Plan provides goals, objectives, policies and programs regarding public safety and provision of emergency access. The Circulation and Scenic Highway Element of the General Plan includes a goal and objective regarding emergency access applicable to the proposed Project. **Table 4.13-2** provides a consistency analysis of the applicable Imperial County General Plan goal and objective as they relate to the proposed Project. While this EIR analyzes the Project's consistency with the General Plan pursuant to CEQA Guidelines section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

TABLE 4.13-2
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS – LAW ENFORCEMENT

General Plan Goal and Objective	Consistent with General Plan?	Analysis
CIRCULATION AND SCENIC HIGHWAY ELEMENT		
Safe, Convenient, and Efficient Transportation System		
Goal 1 The County will provide and require an integrated transportation system for the safe and efficient movement of people and goods within and through the County of Imperial with minimum disruption to the environment.	Yes	Various County maintained roads provide access throughout the Project area. Access to the solar field site parcels would be primarily via the following paved roads: County Highway S30, Anza Road, Kubler Road, Lyons Road, and SR-98. Additionally, the Project may use County maintained unpaved roads when access from existing paved roads or internal Project area roads is unavailable. These unpaved roads would include Wahl Road, Mandrapa Road, Ferrell Road, George Road, Preston Road, and Rockwood Road. The Project does not propose any features which would restrict access to nearby

TABLE 4.13-2
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS – LAW ENFORCEMENT

General Plan Goal and Objective	Consistent with General Plan?	Analysis
		properties. Therefore, the proposed Project is consistent with this Goal. Refer to Section 4.3, Transportation and Circulation, for a full discussion of transportation.
Objective 1.17 Assure that road systems are adequate to accommodate emergency situations and evacuation plans.	Yes	The proposed Project includes primary and secondary access points for each CUP (Figure 2.0-6 thru Figure 2.0-22). Security gates will be located at each CUP to control entry. All driveways leading to the O&M building(s) will be surfaced with a minimum of three (3) inches of asphaltic concrete paving or higher quality material. Further, the Project will be designed in accordance with the FPRP which will require adequate access and road systems for emergencies. Therefore, the proposed Project is consistent with this objective.

Imperial County Office of Emergency Services – Emergency Operations Plan

The Imperial County Operational Area Emergency Operations Plan (EOP) provides a comprehensive, single source of guidance and procedures for the County to prepare for and respond to significant or catastrophic natural, environmental, or conflict-related risks that produce situations requiring coordinated response. It further provides guidance regarding management concepts relating to response and abatement of various emergency situations, identifies organizational structures and relationships, and describes responsibilities and functions necessary to protect life and property. The EOP is consistent with the requirements of the Standardized Emergency Management System (SEMS) as defined in Government Code Section 8607(a) and the U.S. Department of Homeland Security National Incident Management System (NIMS) for managing response to multi-agency and multi-jurisdictional emergencies. The SEMS/NIMS incorporate the use of the Incident Command System (ICS), mutual aid agreements, the operational area concept, and multi/interagency coordination (Imperial County 2007b). The proposed Project will comply with all above-referenced regulations and policies.

4.13.2.2 EXISTING SETTING

The ICSO service area covers the entire 4,597 square miles that comprise Imperial County. The ICSO provides general law enforcement, detention and court services. Sheriff substations are located in the communities of Brawley, Palo Verde, Niland, Salton Sea and Winterhaven (Moreno 2013).

The Sheriff's Main Office (328 Applestill Road, El Centro, CA 92243), located approximately 5 miles from the northern CUP cluster, would be responsible for law enforcement services to the Project area. The

Sheriff's Main Office is currently staffed with 12 deputies, four sergeants, and a first line supervisor. The ICSO also averages three deputies per shift. Additional staff within the main office include deputies in specialized units (e.g. Coroner's Office, Investigations) which can be readily available if an emergency situation arises (Moreno 2013).

4.13.2.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the CEQA Guidelines Appendix G thresholds of significance. The proposed Project would have a significant impact on law enforcement services if it would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered law enforcement facilities, or the need for new or physically altered law enforcement, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for law enforcement.

B. METHODOLOGY

Evaluation of potential impacts to law enforcement service impacts associated with construction, operation and maintenance, and decommissioning of the proposed Project was based on review of the solar field site parcels and surrounding area and consultation with Chief Deputy George Moreno of the Imperial County Sheriff's Office.

C. PROJECT IMPACTS AND MITIGATION MEASURES

Impacts to Law Enforcement Services

Impact 4.13.4 Implementation of the proposed Project could negatively affect the Imperial County Sheriff's Office response times and require additional law enforcement personnel and equipment to serve the Project area. However, the Project would not cause a need to expand law enforcement's public facilities. Therefore, impacts to law enforcement services are **a less than significant impact**.

FULL BUILD-OUT SCENARIO/ALL CUPs (13-0036 THRU 13-0052)

Construction

The proposed Project involves construction of up to 17 individual CUPs developed as solar generation facilities on 32 parcels totaling approximately 2,793 acres. The northern portion of the Project area is approximately five miles from the Sheriff's Main Office located in the City of El Centro. During construction, access to each CUP would be controlled through security gates that will be installed at the roads entering each CUP (WRS 2014).

The proposed Project would introduce a solar energy generation facility to an area previously used for agricultural production. Construction of the Full Build-out Scenario and each individual CUP proposed as part of the Phase CUP Scenario would increase the intensity of workers on the solar field site parcels, especially during construction when the number of people on-site is expected to be the highest. The Applicant will likely have 24-hour security monitoring the facility during Project construction. The security will likely be outsourced to a professional security company and would be trained per typical industry standards (Ferrara 2014e).

Despite the addition of private security, the added intensity of workers on-site may require the Sheriff's Main Office to respond to service calls to the Project during construction and impact the ability of the

Sheriff's Main Office to provide adequate law enforcement services to the current service areas (Moreno 2013). However, the proposed Project would not cause the Sheriff to expand its public facilities. Therefore, impacts to law enforcement services are **less than significant** for the Full Build-out Scenario as well as each individual CUP (13-0036 thru 13-0052).

Operation

The Project incorporates a variety of security features to decrease the likelihood of security threats during operation and maintenance. The perimeter of the Project area would have security-equipment including a 7-foot chain link fence with 3-strand barbwire placed at the top; periodic monitoring of the fence condition will occur; security lighting and posted warning signs will be fixed along the fence (WRS 2014).

Permanent access will be located adjacent to each O&M building. Additionally, the building(s) may have exterior lighting with motion sensors and would have fire and security alarms. In addition, the Applicant will likely have 24-hour security monitoring the facility during Project operation. As with construction, security will likely be outsourced to a professional security company and would be trained per typical industry standards (Ferrara 2014e). An alarm permit would be obtained with associated fees from the Sheriff's Office in compliance with County Ordinance 8.04.040 and 8.04.070 (Moreno 2013).

The intensity of people on-site during operations would be less than the number during construction and would include approximately 15 full-time personnel during operations and maintenance of the Full Build-out Scenario (WRS 2014 page 2.0-58).

Despite the Project's security features and its close proximity to the Sheriff's Office Main Office, the Project would take from the current ability of the Sheriff's Main Office staff to respond to the current level of existing service calls and patrol duties that originate from the vast jurisdiction of the Sheriff's Main Office (Moreno 2013). Likewise, the Sheriff's Office has experienced an increase in service calls as a result of solar farm projects similar to the proposed Project (Moreno 2013). The Sherriff's office will have access to the gates at each CUP site (Ferrara 2013e). Additionally, patrol cars can drive around the facility and see through the chain-link fence.

The ICSO has indicated that the current ability of the Sheriff's Main Office to provide adequate law enforcement service would be affected in association with development of the proposed Project (Moreno 2013). In order to maintain acceptable service standards, up to three additional deputies and two to three additional fully marked and equipped patrol vehicles would be needed to serve the Project (Moreno 2013). However, the proposed Project would not cause the Sheriff to expand its public facilities. Therefore, impacts to law enforcement services are **less than significant** for both the Full Build-out Scenario as well as each individual CUP (13-0036 thru 13-0052) proposed as part of the Phased CUP Scenario.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP areas would be restored to pre-Project soil conditions. Decommissioning activities are similar to construction activities, but are not anticipated to last as long as or be as intensive as the construction activities. As with construction, the Applicant will likely have 24-hour security monitoring the facility during Project decommissioning (Ferrara 2014e). Nevertheless, the added intensity of people on-site would require the Sheriff's Office Main Office to respond to service calls to the Project during construction and impact the ability of the Sheriff's Office Main Office to provide adequate law enforcement services to the current service areas (Moreno 2013). However, the proposed Project would not cause the Sheriff to expand its public facilities. Therefore, impacts to law

enforcement services are **less than significant** for both the Full Build-out Scenario as well as each individual CUP (13-0036 thru 13-0052) proposed as part of the Phased CUP Scenario.

Although Project construction, operation, maintenance, and decommissioning do not have a significant environmental impact because they do not require the construction of a new police substation, the socio-economic impacts to service levels that would be created without providing for three additional deputies and two or three additional patrols cars are a public policy matter for the County. The County has performed an economic and fiscal impact analysis and determined that the fiscal revenue from the proposed Project to the County alone will exceed costs associated with the County providing government services to the site by $1.3 million over the operational term of each CUP or 30 years, whichever is later.

Mitigation Measures

None required.

Significance After Mitigation

Not Applicable.

4.13.2.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The cumulative setting for law enforcement is the service area of the ICSO which includes all of unincorporated Imperial County. Under cumulative conditions, the ICSO would continue to provide law enforcement services to Imperial County, as well as the proposed, approved and reasonably foreseeable projects, identified in Table 3.0-1, in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions Used. This development would increase the number and acreage of renewable energy projects requiring law enforcement.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Law Enforcement Impacts

Impact 4.13.5 Development of the proposed Project, in combination with other proposed, approved and reasonably foreseeable projects in Imperial County would result in an increased cumulative demand for law enforcement. However, cumulative projects would not cause the Sheriff to expand its public facilities. Therefore, impacts to law enforcement services are **less than cumulatively considerable** for both the Full Build-out Scenario each individual CUP (13-0036 thru 13-0052) proposed as part of the Phased CUP Scenario.

FULL BUILD-OUT SCENARIO/ALL CUPS (13-0036 THRU 13-0052)

Construction, Operation and Decommissioning

Increased development in the County, including cumulative projects identified in Table 3.0-1 within Imperial County, would increase demand for law enforcement services under cumulative conditions. The ICSO has indicated that law enforcement will experience a cumulatively considerable impact due to the potential for the Project to increase service calls in an already large service area (Moreno 2013). Specifically, responding to increased service calls to the Project area would strain current service levels of the Sherriff's Office, Main Office. However, the increase in calls would not cause the Sheriff to expand its public facilities. Therefore, impacts to law enforcement services are **less than cumulatively considerable** for both the Full Build-out Scenario as well as each individual CUP (13-0036 thru 13-0052) proposed as part of the Phased CUP Scenario. As a result, the proposed Project, in combination with

other proposed, approved and reasonably foreseeable projects, in Imperial County, would result in a **less than cumulatively considerable impact.**

Under cumulative conditions, development of the Project would increase the ICSO Sherriff's Office Main Office number of service calls in the region and potentially the entire ICSO service area. Providing increased law enforcement to address cumulative demand would require acquisition of service vehicles and increased staffing levels, but not expansion of a Sheriff station or development of a new substation. Therefore, impacts to law enforcement are **less than cumulatively considerable** for both the Full Build-out Scenario as well as each individual CUP (13-0036 thru 13-0052) proposed as part of the Phased CUP Scenario.

Mitigation Measures

None required

Significance After Mitigation

Not applicable.

4.13.3 WATER SERVICE

4.13.3.1 REGULATORY FRAMEWORK

A. STATE

Urban Water Management Planning Act - Assembly Bill (AB) *797*

The Urban Water Management Planning Act was established by Assembly Bill 797 (AB 797) on September 21, 1983. This law evidences recognition by state legislators of water as a limited resource. AB 797 is also a declaration that efficient water use and conservation should be actively pursued throughout the state. AB 797 requires water suppliers providing water for municipal purposes either directly or indirectly to more than 3,000 customers, or supplying more than 3,000 acre-feet per year (AF/Y) of water, to prepare and adopt a specific plan every five years. The purpose of the plan is to define the supplier's current and future water use, sources of supply and supply reliability, and existing conservation measures.

Senate Bill (SB) 610 and SB 221

SB 610 (Chapter 643, Statues of 2001) and SB 221 (Chapter 642, Statues of 2001) amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 works in conjunction with SB 221 to promote more collaborative planning between local water suppliers and cities and counties. These statutes require submission of detailed water availability information to be provided to the city and county decision-makers prior to approval of specified large development projects. Both statutes also require this detailed information to be included as part of the administrative record to substantiate an approval action by the city or county on such projects. Both SB 610 and SB 221 recognize local control and decision-making regarding the availability of water for projects and the approval of projects.

B. LOCAL

Imperial County General Plan

The Imperial County General Plan provides goals, objectives, policies and programs regarding the preservation and use of water. **Table 4.13-3** provides a consistency analysis of the applicable Imperial County General Plan goals and objectives from the Conservation and Open Space Element and

Geothermal/Alternative Energy and Transmission Element as they relate to the proposed Project. While this EIR analyzes the Project's consistency with the General Plan pursuant to CEQA Guidelines section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

TABLE 4.13-3
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS – WATER SERVICE

General Plan Goals and Objectives	Consistent with General Plan?	Analysis
CONSERVATION AND OPEN SPACE ELEMENT		
Preservation of Water Resources		
Goal 8: The County will conserve, protect, and enhance the water resources in the planning area.	Yes	The Project proposes a number of measures to conserve, protect and enhance water resources. Conservation would occur with regard to washing panels only when necessary as well as through the reduction in water usage needed for the proposed Project compared to existing agricultural use. Water resources would be protected through a implementing the providions of a National Pollutant Discharge Elimination System (NPDES) permit; and creation and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must list BMPs the discharger would use to protect storm water runoff and the placement of those BMPs; include a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the Federal Clean Water Act section 303(d) list for sediment. The Applicant has also identified BMPs to be implemented as part of the proposed Project (refer to **Table 2.0-9** in Chapter 2.0, Project Description). Therefore, the proposed Full Build-out Scenario and each CUP is consistent with this goal. Impacts to water quality are discussed further in Section 4.11, Hydrology and Water Quality.

TABLE 4.13-3
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS – WATER SERVICE

General Plan Goals and Objectives	Consistent with General Plan?	Analysis
Objective 8.6 Eliminate potential surface and groundwater pollution through regulations as well as educational programs.	Yes	Potential impacts to surface and groundwater quality would be addressed through the NPDES, SWPPP and BMPs. In addition, the on-site wastewater system(s) would be designed to meet all federal and state requirements as well as Imperial County Public Health Department, Division of Environmental Health standards. The Project must also comply with the SWRCB's Water Quality Control Policy for siting, design, operation, and maintenance of onsite wastewater treatment systems. Proper design of the wastewater system would ensure that groundwater is protected. Therefore, the proposed Project is consistent with this objective.
GEOTHERMAL/ALTERNATIVE ENERGY AND TRANSMISSION ELEMENT		
Efficient Water Use		
Goal 3 Geothermal/alternative energy operations will be required to efficiently utilize water.	Yes	The proposed Project, as a solar generation facility, would be an alternative energy operation. The Project would use water from the IID canals during the construction and operation the Project. The "Wistaria Ranch Conceptual Drainage Study and Storm Water Quality Analysis" (Fuscoe 2014) indicates that sufficient water is available, based on the fact Project water is lower than current agricultural demands. The Project does not proposed wasteful or inefficient use of water during construction or operation. Therefore, the proposed Project is consistent with this Goal.
Objective 3.3 Encourage the efficient utilization of water in geothermal/alternative energy operations, and foster the use of non-irrigation water by these industries.	Yes	Refer to analysis under Goal 3.

4.13.3.2 EXISTING SETTING

The southern CUP cluster (CUPs 13-0050, 13-0051 and 13-0052), is adjacent to a portion of the All-American Canal network. The All-American Canal service to Imperial Valley originates from the Colorado River which leads to the main canals (East Highline, Central Main and Westside Main) and branches off to the All-American Canal to feed the IID system. IID controls and maintains approximately 1,675 miles of irrigation canals in the Imperial Valley. IID's distribution system includes ten reservoirs, and a total storage capacity of 3,300 AF (IID 2014). IID canals and drains currently serve the solar field site parcels (Fuscoe 2014, p. 34).

The Project area is located within the Imperial Groundwater Basin (Fuscoe 2014, p 22). As previously indicated, the Project proposes to use surface water from IID, greater than groundwater.

Existing agricultural water uses are estimated at an average of 5.45 acre-feet per year (AF/Y) per net-irrigable acreage of agricultural land (IID 2013). The proposed Full Build-out Scenario has 2,589 acres of agricultural land that would be temporarily converted (i.e. agricultural fields of the proposed Full Build-out Scenario minus the acreage of roads and ditches currently on the site). Therefore, 5.45 AF/Y multiplied by 2,589 acres is equal to a historic yearly average water use of 14,110.05 AF/Y for the Full Build-out Scenario.

4.13.3.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The proposed Project would have a significant impact with regard to water service if it would:

a) Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects;

b) Not have sufficient water supplies available to serve the project from existing entitlements and resources, or if new or expanded entitlements are needed; or

c) Substantially degrade groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

B. METHODOLOGY

Evaluation of potential water supply and service impacts of the proposed Project were based on correspondence with the Applicant, and the *Wistaria Ranch Conceptual Drainage Study and Storm Water Quality Analysis* (Fuscoe 2014).

C. PROJECT IMPACTS AND MITIGATION MEASURES

New Water Treatment Facilities

Impact 4.13. 6 The Project proposes to install a point-of-entry water treatment system to provide water for CUPs that include an O&M building. The facilities would be constructed within the footprint of the CUP and would not disturb off-site lands creating impacts beyond those addressed in this EIR. Therefore, impacts associated with provision of water treatment facilities are considered **less than significant.**

FULL BUILD-OUT SCENARIO/ALL CUPs (13-0036 THRU 13-0052)

Construction

At some point during construction, a point-of-entry water treatment system will be installed on CUPs that include an O&M building. The treatment system would provide water of potable quality which would be connected to all plumbing fixtures in the O&M building(s). This system may be temporarily connected to the construction trailers as well. The point-of-entry system would not be used for human consumption. Bottled water will be trucked to the site for drinking water. No significant impacts that could not be mitigated would occur in association with construction of the water treatment system on each CUP site. Therefore, impacts resulting from construction of new water treatment facilities are considered **less significant** for both the Full Build-out Scenario and all CUPs (13-0036 thru 13-0052) proposed as part of the Phased CUP Scenario.

Operation

The point-of-entry water treatment system would provide the appropriate panel wash water or potable water requirements to provide water during Project operation. Components of the water treatment system include: one raw and one treated tank for storage, a filtration system with a disinfection method. In addition, a raw water supply, power distribution system and a disposal area for back washing is required for operation of the water treatment system. The Project may also utilize an additional 10,000 gallon storage tank or tanks to store treated water for sanitary uses. The Imperial County Building Code requires potable water to be connected to all plumbing fixtures. However, IID does not allow its water to be consumed by humans. While potable water will be connected to plumbing fixtures, bottled water will be provided for drinking water.

The water treatment system would be private and operated and maintained within the boundaries of each CUP area (i.e. within the disturbed area of the Project site). No off-site expansion of a public water treatment facility would occur in order to provide water treatment during operation of the Full Build-out Scenario or the Phased CUP Scenario. Instead, the on-site private water treatment system is an Applicant proposed Project Design Feature that will comply with applicable water quality standards for treating raw water. Therefore, impacts resulting from operation of the water treatment facilities are considered **less significant** for both the Full Build-out Scenario and all CUPs (13-0036 thru 13-0052) proposed as part of the Phased CUP Scenario.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center, including on-site water treatment system facilities would be removed and decommissioned and the CUP areas would be restored to pre-Project soil conditions. With removal of the O&M Building(s), on-site water treatment would no longer be necessary. Therefore, **no impact** would occur with regard to water treatment for both the Full Build-out Scenario as well as each of the 17 individual CUPs proposed as part of the Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

Impacts to Water Supply

Impact 4.13.7 The Project proposes to obtain water from the IID canal network for construction, operation and maintenance, and decommissioning activities. Project demands for water would be lower than current agricultural water supply requirements. The IID Canal

system and water entitlements are adequate to meet the proposed water demands. The Project would not cause a need to expand water entitlements. Therefore, impacts to water supply are considered **less than significant.**

FULL BUILD-OUT SCENARIO/ALL CUPs (13-0036 THRU 13-0052)

Construction

During construction of the Full Build-out Scenario and each CUP, water would be required for a variety of activities, including dust suppression, earth compaction, the creation of engineered fill, and concrete preparation. An estimated total of 1,200 acre-feet (AF) of water would be used for dust control and other construction activities associated with the Full Build-out Scenario (WRS 2014). Water would be obtained from the adjacent IID canal system (Fuscoe 2014, p. 22). The Applicant is seeking a temporary water use permit from the IID for construction and set temporary water pumps within each CUP to receive water from the IID canal system at each CUP.

As such, construction water use would not result in a significant decrease in water supply. As of January 15, 2014, IID has an Interim Water Supply Policy (IWSP) remaining balance of water equal to 23,191 AF/Y. This water is available for non-agricultural projects such as the proposed Project (DD&E 2014). Water needs would be provided by adjacent IID Canals at an estimated 1,200 AF during construction. This estimate is much less than the needs of existing and historic agricultural uses of an average of 14,110.05 AF/Y on the proposed Project parcels. Therefore, impacts to water supply during construction, when taking into account the Full Build-out Scenario as well as each of the 17 individual CUPs, is considered **less than significant**.

Operation

Point-of-entry water treatment system would be installed to provide water of potable quality which would be connected to all plumbing fixtures in the operations and maintenance building. Components of the water treatment system include: one raw and one treated tank for storage, a filtration system with a disinfection method. In addition, a raw water supply, power distribution system and a disposal area for back washing is required for operation.

The proposed Project anticipates a requirement of approximately 60 AF/Y during operation of the Solar Energy Center. Each CUP would utilize approximately 3.5 AF/Y. The 60 AF/Y would include water required fire protection, sanitary water, and maintenance activities (panel washing and dust control). Bottled water would be provided for drinking water during both construction and operation.

TABLE 4.13-4
OPERATION AND MAINTENANCE-PHASE INDIVIDUAL CUP WATER USAGE ESTIMATES

Source of Water Demand	Amount Required
Fire Protection	7 AF/Y
Sanitary Water	5 AF/Y
Panel Washing	14 AF/Y
Dust Suppression	35 AF/Y
Potable Water	5 AF/Y
Total	**60 AF/Y**

Source: Ferrara 2014a.

Operation and maintenance water use would not result in a significant decrease in water supply. As of January 15, 2014, IID has an IWSP remaining balance of water equal to 23,191 AF/Y. This water is available for non-agricultural projects such as the proposed Project (DD&E 2014). Water needs would be provided by adjacent IID Canals at an estimated 60 AF/Y for operation and maintenance**.** This estimate is

much less than the needs of existing and historic agricultural uses of an average of 14,110.05 AF/Y on the proposed Project parcels. Therefore, impacts to water supply during operations and maintenance, when taking into account the Full Build-out Scenario as well as each of the 17 individual CUPs, are considered **less than significant**.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP areas would be restored to pre-Project soil conditions. Decommissioning activities are similar to construction activities, and are not anticipated to last as long as the construction activities. As such, demands for water supply during decommissioning are anticipated to be the similar to those experienced during construction. Therefore, impacts associated with water supply during decommissioning are anticipated to be **less than significant** when considering the Full Build-out Scenario as well as each of the 17 individual CUPs.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

Impacts to Groundwater

Impact 4.13.8 The solar field site parcels are located within the Imperial Groundwater Basin. However, the Project does not propose to use groundwater during construction, operation or decommissioning activities thereby avoiding impacts to groundwater supplies. Likewise, development of both the Full Build-out Scenario and each CUP would not introduce a substantial amount of impervious surfaces that would interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Therefore, impacts to groundwater are considered **less than significant**.

FULL BUILD-OUT SCENARIO/ALL CUPs (13-0036 THRU 13-0052)

Construction

During Project construction, a slight potential exists for encountering groundwater. The groundwater in the Project area is brackish and typically encountered at a depth of 5 to 10 feet below ground surface. Potential construction activities that may require dewatering include excavation activities associated with the construction of footings and foundations for the Project substation, construction of new transmission poles within the Mount Signal Solar Farm Gen-Tie alignment, and overhead collection system poles within the Electrical Collector Line Corridor.

While the groundwater level noted should not be interpreted to represent an accurate or permanent condition, shallow groundwater levels and the potential need for dewatering will need to be considered during construction, especially with regard to deep drilled pier foundations for the Gen-Tie line. Dewatering associated with these portions of construction would be localized to transmission pole locations or the substation and would not result in a significant decrease in production rates of existing or planned wells. During the construction phase, a significant amount of construction dewatering is not expected to be required (Fuscoe 2014, p. 34). Any groundwater that is encountered would be pumped to the surface and discharged on site. It is anticipated that all groundwater discharges can be fully contained within the boundaries of each CUP either through infiltration at the soil surface or retained in the on-site detention basins/ponding areas at each CUP area. The Project does not propose the use of groundwater during construction.

The existing site grade and drainage of each solar field site parcels parcel would be retained or improved as part of construction. Further, minimal storm drains would be constructed. The impervious areas would drain and be allowed to pond in the detention basins and/or ponding areas under the arrays. This would effectively limit all directly connected impervious areas (DCIAs) on the solar field site parcels (Fuscoe 2014, p. 28). Therefore, both the Full Build-out Scenario and the Phased CUP Scenario would result in a **less than significant** impact to groundwater supply and recharge during Project construction.

Operation

The Project does not propose the use of groundwater, or contain components that would adversely affect groundwater recharge during operation. Groundwater recharge in the Project area would not be significantly affected due to the fact that the majority of each CUP would feature a pervious landscape. Detention basins and shallow ponding areas would also provide infiltration and groundwater recharge. No pumping of groundwater is anticipated during Project operation. Further, water demand during operation of both the Full Build-out Scenario and each individual CUP is expected to be much less than the needs of the existing agricultural land (Fuscoe 2014, p. 34). Therefore, both the Full Build-out Scenario and the Phased CUP Scenario would result in a **less than significant** impact to groundwater supply and recharge during Project operation.

Decommissioning

Decommissioning would result in the dismantling and removal of infrastructure constructed as part of the proposed Project. Removal of Project structures and infrastructure would result in an increase in the amount of pervious surface each CUP and the Electric Collector Line Corridor. Groundwater may be encountered during the removal of footings and foundations for the Project substation or overhead collection system poles. Dewatering associated with removal of these structures would be localized to transmission pole locations or the substation and would not result in a significant decrease in production rates of existing or planned wells. Therefore, both the Full Build-out Scenario and the Phased CUP Scenario would result in a **less than significant** impact to groundwater supply and recharge during Project decommissioning.

Mitigation Measures

None required.

Significance after Mitigation

Not applicable.

4.13.3.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The cumulative setting and geographic scope for water service is the service area of the IID water service area, which includes nine cities and approximately 500,000 acres of agricultural land in Imperial County (IID 2014).

Other proposed, approved and reasonably foreseeable projects, identified in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions Used, are located within the IID Canal system and seek water supply on an individual project basis.

It should be noted as evidenced by the analysis under Impact 4.13.6 and 4.13.8, above, that the proposed Project would construct, operate and decommission an on-site, private water treatment system. As such, the proposed Project would not impact a public water treatment system and therefore would not create a cumulatively considerable impact to a public water treatment system. Likewise, the

proposed Project would not use groundwater as a water supply source or impact groundwater recharge. Therefore, the proposed Project would not create a cumulatively considerable impact to groundwater.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Water Supply Impacts

Impact 4.13.9 Development of the proposed Project would require use of surface water from the IID canal system. Requests for water supply are approved by the IID on a project-by-project basis. The proposed Project would require less water than current agricultural uses on the solar field site parcels. Therefore, the Project's contribution to cumulative water supply impacts is considered **less than cumulatively considerable**.

FULL BUILD-OUT SCENARIO/ALL CUPs (13-0036 THRU 13-0052)

Construction, Operation and Maintenance, and Decommissioning

As discussed under Impact 4.13.6, the Project would need approximately 1,200 AF of water for construction of the Full Build-out Scenario, and 3.5 AF/Y per CUP or 60 AF/Y for the Full Build-out Scenario during operation. At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP areas would be restored to pre-Project soil conditions. The decommissioning work will need approximately 1,200 AF of water. When returned to agricultural use, the water rights will be given back to the landowners of each parcel through a trust maintained with the IID.

Water for the Project construction and decommissioning would be obtained from the IID through a temporary water use permit that grants water usage on a project-by-project basis, subject to analysis of availability. The Applicant has obtained a will serve letter from the IID indicating that the 60 AF/Y requested for annual operation is well within the remaining balance of 23,800 AF available for new industrial uses (Plourd 2014). Further, demand for water service for agricultural uses currently occurring on the solar field site parcels is much greater than the demand for water service anticipated by the proposed Project (Fuscoe 2014, p. 34). As such, impacts related to water supply for the proposed Project site are not expected to combine with similar impacts of approved, proposed, and reasonably foreseeable projects identified in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions Used. Many of the other projects on the cumulative project list are solar development projects that will also use less water than their current use. Therefore, both the Full Build-out Scenario as well as each of the 17 individual CUPs proposed in association with the Phased CUP Scenario would have a **less than cumulatively considerable impac**t on water entitlements and would not require new water supply entitlements.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

4.13.4 WASTEWATER SERVICE

4.13.4.1 REGULATORY FRAMEWORK

A. FEDERAL

Clean Water Act

The Clean Water Act (CWA) was adopted in 1972 to protect the waters of the nation. The United States Environmental Protection Agency (EPA) and corresponding state agencies regulate public wastewater

systems to ensure compliance with the CWA. The NPDES Permit Program was instituted to implement the CWA regulatory standards. All point sources (e.g., a discreet conveyance such as a pipe or ditch) discharging pollutants into Waters of the United States (WUS) are required to obtain an NPDES permit under the CWA. Facilities discharging directly to surface waters must also obtain an NPDES permit. The proposed Project will require an NPDES permit in association with both construction and operation. The NPDES permit is described in further detail in Section 4.11, Hydrology and Water Quality, under the Federal and State Regulatory Framework.

B. STATE

Porter-Cologne Water Quality Act

The California Legislature enacted the Porter-Cologne Water Quality Control Act in 1969 to preserve, enhance, and restore the quality of the State's water resources. The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) were established by the Act as the primary state agencies charged with controlling water quality in California. The Porter-Cologne Water Quality Control Act establishes water quality policy, enforces surface water and groundwater quality standards, and regulates point and non-point source pollutants. The Act also authorizes the SWRCB to establish water quality principles and guidelines for long-range resource planning including groundwater and surface water management programs and the control and use of recycled water.

State Water Resources Control Board

The SWRCB has dual authority to allocate and protect water. This two-fold responsibility enables the SWRCB to provide comprehensive protection for California's waters. Nine RWQCBs dispersed throughout California carry out the duties of the SWRCB. The RWQCBs develop and enforce water quality objectives and implementation plans that will best protect the beneficial uses of the state's waters.

The proposed Project is within the jurisdiction of the Colorado River Basin Regional Water Quality Control Board, Region 7 (RWQCB-7). The RWQCB-7 regulates the discharge of waste to surface waters (rivers, streams, lakes, wetlands, and the Pacific Ocean) as well as to storm drains, to the ground surface, and to groundwater.

Assembly Bill 885 - California Onsite Wastewater Treatment Systems

Assembly Bill (AB) 885 was signed into law in September 2000. AB 855 requires the SWRCB to develop statewide regulations for the permitting and operation of on-site wastewater treatment systems, better known as septic systems. These regulations are developed through consultation with the Department of Health Services (DHS), California Conference of Directors of Environmental Health (CCDEH), California Coastal Commission (CCC), counties, cities, and other interested parties. Individual disposal systems that use subsurface disposal are all included under AB 885 (Imperial County 2011, p. 3.11-5). The Project proposes an Onsite Wastewater Treatment System (OWTS).

C. LOCAL

Imperial County General Plan

The Imperial County General Plan does not contain any goals, objectives, policies or programs that pertain to wastewater or on-site septic systems that are directly applicable to the proposed Project.

Imperial County Public Health Department, Section of Environmental Health & Consumer Protection Services

The Imperial County Public Health Department, Section of Environmental Health & Consumer Protection Services, is responsible for issuance of sanitation permits for private on-site sewage disposal systems in

the County. Coordination of site design for proposed projects must occur with the Public Health Department to obtain final permits. The Project's proposed OWTS will be subject to review by the County Public Health Department.

Imperial County Land Use Ordinance, Division 10 Building, Grading and Sewage Regulations

Chapter 13, Sanitation Permits, of the Imperial County Land Use Ordinance, Division 10 Building, Grading and Sewage Regulations, regulates the construction, relocation, and alteration of sewage disposal systems in the unincorporated areas of Imperial County. Standards for such systems described in this chapter must be met for a permit to be issued by the County Public Health Department. The Project's proposed OWTS will be subject to these standards.

4.13.4.2 EXISTING SETTING

According to the Phase I Environmental Assessments (ESAs) prepared for WRS (AECOM 2013b and AECOM 2013c), no septic systems, including septic tanks or leach fields, were documented on the solar field site parcels. Likewise, none of the solar field site parcels are connected to a municipal sanitary sewer system and no wastewater is currently generated on the Project site (AECOM 2013b and AECOM 2013c).

4.13.4.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The proposed Project would have a significant impact to wastewater if it would:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

b) Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or

c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity within the collection system to serve the project's projected demand in addition to the provider's existing commitments; or

d) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

B. METHODOLOGY

Evaluation of potential wastewater impacts of the proposed Project were based on review of the Project area, information provided by the Applicant, and correspondence with Jeff Lamoure, Deputy Director, County of Imperial Public Health Department (Lamoure 2013).

C. IMPACTS AND MITIGATION MEASURES

Wastewater Treatment and Infrastructure

Impact 4.13.10 The Project area is not currently served by a wastewater system. OWTS are proposed for each CUP. Soils within each of the solar field site parcels may not be capable of supporting sanitary waste septic systems. Therefore, impacts to wastewater treatment and conveyance infrastructure are considered **potentially significant**.

FULL BUILD-OUT SCENARIO/ALL CUPs (13-0036 THRU 13-0052)

Construction

During construction, a temporary septic system for wastewater or a temporary storage holding tank would be utilized for wastewater and sewage at the solar field site parcels. Port-a-potties would also be used throughout the solar field site parcels as needed.

Operation

During operations and maintenance of the solar facility, the Project would collect wastewater from sinks and toilets in the O&M building(s). Although the Project area is not currently served by a wastewater system, an on-site septic system will be developed to serve each CUP (Ferrara 2014b). The Project shall obtain a permit from the Imperial County Public Health Department to construct and operate a septic system and leach field for the O&M building(s), if proposed for the Project, or wastewater will be treated and discharged pursuant to an operation and discharge permit from the Regional Water Quality Control Board (RWQCB).

According to the Imperial County Public Health Department, Division of Environmental Health, an onsite wastewater treatment system (septic system) must meet the SWRCB's Water Quality Control Policy for siting, design, operation, and maintenance of onsite wastewater treatment systems (OWTS Policy). In addition to State requirements, siting and design must also meet local regulatory requirements as described in Title 9 of Imperial County's Codified Ordinance (LaMoure 2013).

For non-residential facilities, such as the proposed Project, the design flow rate is based on: typical values noted in the California Plumbing Code; the Environmental Protection Agency OWTS Manual; or the number of plumbing fixture units, whichever is greater, for the type of building occupancy. Any deviations must be supported by appropriate water usage information and/or the use of low water use fixtures (LaMoure 2013).

A standard onsite wastewater treatment system application must include, but is not limited to:

- Complete Permit Application for Septic System and fee.
- Soil Percolation Report consistent with Imperial County Uniform Policy and Methods for Soils.
- Evaluation and including a measure of groundwater depth along with a general description of soil type and any limiting conditions encountered at the site.
- A scaled site plan with sufficient detail. The site plan must also identify an OWTS replacement area.

The proposed wastewater system will be required to submit a wastewater treatment system application to the Imperial County Public Health Department, Division of Environmental Health for review and approval prior to construction. The Department's review will ensure that the proposed system is designed and constructed consistent with all applicable codes and standards. Alternatively, wastewater may be treated and discharged pursuant to an operation and discharge permit from the RWQCB (refer to Impact 4.6.7 and associated analysis in Section 4.6, Geology and Soils).

The Project's preliminary geotechnical review indicates that the near surface soils are clay and have very low to low infiltration rates. Therefore, the Project may not be able to satisfy the permitting requirements for use of an on-site sanitary waste septic system(s) and leach field. In that event, the Project's wastewater will be treated and discharged pursuant to an operation and discharge permit from the RWQCB (refer to Impact 4.6.7 and associated analysis in Section 4.6, Geology and Soils).

The system would be required to meet all applicable state and local standards as described above. At present, the site may contain soils that cannot support the use of the proposed onsite sanitary waste

septic system. Therefore, impacts to wastewater treatment and infrastructure are considered **potentially significant** for both the Full Build-out Scenario and each of the 17 CUPs proposed as part of the Phased CUP Scenario.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP areas would be restored to pre-Project soil conditions, which would not require provision of wastewater conveyance or treatment. Furthermore, during decommissioning of the Project, Port-a-potties would be used throughout the solar field site parcels as needed. Thus, impacts to wastewater treatment and infrastructure would be **less than significant for** both the Full Build-out Scenario and each of the 17 CUPs proposed as part of the Phased CUP Scenario.

Mitigation Measure

Implement mitigation measure MM 4.6.3 (refer to Section 4.6, Geology and Soils).

Significance After Mitigation

Mitigation measure MM 4.6.3 would address potential impacts to the implementation of wastewater treatment and infrastructure by confirming the soil suitability for a leach field and/or underground wastewater storage tank at locations where the facilities are proposed. Following implementation of MM 4.6.3, impacts to wastewater treatment and infrastructure implementation would be reduced to **less than significant** for the Full Build-out Scenario as well as each of the 17 individual CUPs.

4.13.4.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

A. CUMULATIVE SETTING

Based on the absence of municipal wastewater infrastructure, the cumulative setting and geographic scope for wastewater service is limited to the Project area.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Wastewater Impacts

Impact 4.13.11 Development of the proposed Project would generate demand for on-site wastewater treatment. An OWTS is proposed where necessary at individual CUPs to provide wastewater service. Therefore, cumulative wastewater impacts are considered **less than cumulatively considerable**.

FULL BUILD-OUT SCENARIO/ All CUPs (13-0036 THRU 13-0052)

Construction

The Project is proposed in a portion of the County that is characterized by agriculture and solar development. As such, no municipal wastewater infrastructure is located in the Project area. Because the proposed OWTS would be independent of each other, no cumulative impact would occur in association with other proposed, approved and reasonably foreseeable projects.

During construction, the construction trailer compound will either develop a septic system for wastewater or utilize a temporary storage tank and transport sewage to the nearest wastewater treatment facility. Port-a-potties will also be used throughout the Project site during construction (WRS 2014).

Operation

As discussed under Impact 4.13.10, the solar field site parcels are not currently served by municipal wastewater service. Sanitary waste generated during Project operations would be collected and sent to a sanitary waste septic system and leach field. Alternatively, the Project's wastewater will be treated and discharged pursuant to an operation and discharge permit from the RWQCB (refer to Impact 4.6.7 and associated analysis in Section 4.6, Geology and Soils).

Because of the separate function of the on-site septic system, and the lack of municipal infrastructure in the area, implementation of the Project would not contribute to a cumulative impact to wastewater facilities. The proposed wastewater facilities would be reviewed by the Imperial County Environmental Health Department to ensure that each facility is properly designed and that all wastewater requirements are satisfied. Therefore, cumulative impacts to wastewater service are **less than cumulatively considerable** for both the Full Build-out Scenario as well as each of the 17 individual CUPs proposed in association with the Phased CUP Scenario.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP areas would be restored to pre-Project soil conditions, which would not require provision of wastewater conveyance or treatment. Further, decommissioning of the on-site septic system would not have an impact on surrounding infrastructure as it functioned independently. Furthermore, during decommissioning of the Project, Port-a-potties would be used throughout the solar field site parcels as needed. Thus, impacts to wastewater treatment and infrastructure would be **less than cumulatively considerable** when considering the Full Build-out Scenario as well as each of the 17 individual CUPs.

Mitigation Measures

None Required.

Significance After Mitigation

Not applicable.

4.13.5 SOLID WASTE

4.13.5.1 REGULATORY FRAMEWORK

A. STATE

California Integrated Waste Management Act

The State of California Integrated Waste Management Act (CIWMA) of 1989 (California Assembly Bill [AB] 939), which is administered by the Department of Resources Recycling and Recovery (CalRecycle), requires each city and county to develop a source reduction and recycling element (SRRE) of an integrated waste management plan containing specified components, including a source reduction component, a recycling component, and a composting component. CalRecycle summarizes waste management problems specific to each county and provides an overview of actions that would be taken to achieve the SRRE implementation schedule (Pub. Res. Code § 41780). Under the SRRE, counties are required to demonstrate how they intend to achieve the mandated diversion goals through the implementation of various programs. The SRRE was approved by CalRecycle (formerly California Integrated Waste Management Board [CIWMB]) on November 17, 1993 and adopted in December 1993. The goal of the solid waste management efforts is not just to increase recycling, but to decrease the amount of waste entering landfills. With certain exceptions, the SRRE of that plan is required to divert a

minimum 50 percent of all solid waste from landfill disposal, through source reduction, recycling, and composting activities.

B. LOCAL

Countywide Integrated Waste Management Plan for Imperial County

All California counties are required to prepare and submit to CalRecycle a Countywide Integrated Waste Management Plan (CIWMP). The CIWMP is to include all SRREs, all Household Hazardous Waste Elements, a Countywide Siting Element, all Non-disposal Facility Elements, all applicable regional SRREs, Household Hazardous Waste Elements, and an applicable Regional Siting Element (if regional agencies have been formed). Imperial County's CIWMP was approved by CalRecycle in May of 2000. The Executive Director of the CIWMB approved by Resolution 2008-91 the Five-Year Review Report of the CIWMP for the County of Imperial on June 17, 2008.

The County of Imperial agreed to implement the following programs to meet the required diversion goals:

1. Agriculture Plastic
2. Compost Operation
3. Procurement Policy
4. Christmas Tree Diversion
5. Commercial Source and Recycling
6. Construction and Demolition
7. School Recycling
8. County Waste Reduction Policy

Imperial County General Plan

The Imperial County General Plan does not contain any goals, objectives, policies or programs pertaining to solid waste that are applicable to the proposed Project.

4.13.5.2 EXISTING SETTING

The solar field site parcels currently consist of agricultural land that is void of structures with the primary exception of IID and landowner irrigation facilities. As such, the Project does not generate trash and therefore is not served by a solid waste disposal provider. The County has permitted nine landfills including the Allied Imperial Landfill located at 104 East Robinson which has remaining capacity of (Hall 2013). In addition, the County has contracts with private collection companies for solid waste pick-up.

4.13.5.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the CEQA Guidelines Appendix G thresholds of significance for Utilities and Service Systems criteria "f" and "g." The proposed Project would have a significant impact to solid waste if it would:

f) Not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or

g) Fail to comply with federal, state, and local statutes and regulations related to solid waste.

In addition, the following County standards were analyzed to determine significant impacts. Based on these standards, the Project would have a significant impact if it would:

a) Result in the need for new systems or supplies, or a substantial expansion or alteration to solid waste materials recovery or disposal; or

b) Substantially affect the County's ability to comply with solid waste source reduction programs.

B. METHODOLOGY

Evaluation of potential solid waste impacts is based on information provided by the Applicant as well as consultation with Allied Waste Services.

C. IMPACTS AND MITIGATION MEASURES

Impacts to Solid Waste Service and Landfill Capacity

Impact 4.13.12 Solid waste would be generated during construction, operation and maintenance, and decommissioning of the proposed Project. Solid waste materials would be disposed of using a locally-licensed waste hauling service and disposed of at a local landfill with sufficient capacity to accept this waste. Thus, a **less than significant impact** is identified for this issue.

FULL BUILD-OUT SCENARIO/ALL CUPS (13-0036 THRU 13-0052)

Construction

The solar field site parcels consist of agricultural land void of structures with the primary exception of IID and landowner irrigation facilities. The farmers would be allowed to harvest crops before the fields are prepared for construction. Existing landowner irrigation ditches within the boundary of each CUP that would conflict with the site's configuration would be demolished and reused on-site as recycled base or trucked off site to be recycled or disposed at a landfill.

Demolition of existing irrigation ditches within the boundary of each CUP that would conflict with site configuration would occur at the outset of construction. Demolition debris would include cement ditches, which would be crushed in place and not need disposal. During Project construction activities, small amounts of trash would be generated during construction from materials represented in **Table 4.13-5**. All construction waste is anticipated to be removed by Allied Waste Services, a contracted commercial garbage collection agency. Allied Waste would haul non-recyclable/reusable construction and demolition solid waste to the Allied Imperial Landfill located at 104 East Robinson in Imperial County, which accepts trash, concrete and non-hazardous material. This facility has a remaining capacity of approximately 15 million cubic yards or 510,000 tons per year (Hall 2013).

Recyclable or reusable construction and demolition waste would be separated from other waste in on-site bins to be removed by Allied Waste Services and disposed of at the nearest Allied Waste Recycling Center (702 East Heil, El Centro) (Bringle 2013).

Operation

Once the solar facility begins operation, small amounts of trash are likely to be generated by up to 15 full-time staff on each CUP. A contract would be initiated with a local waste provider for pick-up and disposal. It is anticipated that the waste would be removed as often as on a weekly basis. Waste generated during operations would be recycled where possible and disposed of at a local landfill.

As with construction and demolition waste, all trash, litter, garbage, and other solid waste generated during operations is anticipated to be collected by separate garbage and recycling bins and removed by Allied Waste Services and disposed of at the Allied Imperial Landfill or the nearest Allied Waste Recycling Center (702 East Heil, El Centro) (Bringle 2013).

Solid waste disposal services are provided on a contract basis. Allied Waste Services has not indicated any problems associated with providing pick-up/ removal service to the proposed Project. In addition,

the Allied Imperial Landfill has a remaining capacity of approximately 15 million cubic yards. The Applicant would be required to pay fees commensurate to the waste and volume generated (Hall 2013). Therefore, impacts to solid waste service and landfill capacity when taking into account the Full Build-out Scenario as well as each of the 17 individual CUPs proposed as part of the Phased CUP Scenario would be considered **less than significant**.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP areas would be restored to pre-Project soil conditions. Decommissioning activities are similar to construction activities, and are not anticipated to last as long as the construction activities. Similar to construction, decommissioning activities would result in the generation of recyclable and non-recyclable solid waste materials. Most of the materials during decommissioning are steel, copper, and solar panels which will be recycled/disposed of according to a restoration plan (WRS 2014a). Therefore, during decommissioning of the Project, impacts to solid waste service and landfill capacity would be anticipated to be **less than significant** when considering the Full Build-out Scenario as well as each of the 17 individual CUPs proposed as part of the Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

4.13.5.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The geographic scope for the cumulative setting for solid waste is the service area of Allied Waste Services which encompasses the entire County of Imperial. As previously described in the Existing Setting, the County has permitted nine landfills and contracts with private collection companies for solid waste pick-up. Other large scale proposed, approved and reasonably foreseeable renewable energy projects in County of Imperial are identified in Table 3.0-1 in Chapter 3.0, Introduction to the Analysis and Assumptions Used. All of these projects are located within the cumulative setting for solid waste.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to Solid Waste Service and Landfill Capacity

Impact 4.13.13 Implementation of the proposed Project, in combination with other proposed, approved and reasonably foreseeable projects in the County of Imperial, would result in cumulative demand for solid waste service and landfill capacity. However, the proposed Project would not generate a substantial quantity of waste and disposal service is available to serve the Project. Therefore, cumulative solid waste impacts are considered **less than cumulatively considerable impact**.

FULL BUILD-OUT SCENARIO/ALL CUPS (13-0036 THRU 13-0052)

Construction

The proposed Project would generate demolition and construction waste during construction. Cumulative project development in Imperial County, as identified in Table 3.0-1, would generate an additional demand for solid waste pick-up and disposal services. Solid waste disposal services are provided under contract with private waste hauling companies. Each CUP owner of solar energy site

owner would contract with a private waste company. Accordingly, each private waste hauling company operator may need to add additional staff, trucks and refuse and recycling bins to accommodate the increase in demand.

As discussed under Impact 4.13.12, local landfills have remaining capacity to serve cumulative development identified in Table 3.0-1. In addition, the landfill that would receive refuse from the Project (i.e. the Allied Imperial Landfill), has a remaining capacity of approximately 15 million cubic yards (Hall 2013).

Because no major demolition or waste would be generated during construction, the proposed Project would have a **less than cumulatively** considerable contribution to the cumulative solid waste impacts. Because sites chosen for solar field development are typically dessert or agricultural land void of structures, solar energy projects are not considered large waste generators and would not substantially increase demand for solid waste services or disposal. Therefore, cumulative construction impacts to solid waste service and landfill capacity when taking into account the Full Build-out Scenario as well as each of the 17 individual CUPs proposed as part of the Phased CUP Scenario are **less than cumulatively considerable**.

Operation

Once in operation, trash and waste generation would be minimal based on the small number of employees and lack of waste generating activities at each CUP. Waste generated during Project operation is proposed to be recycled where possible or disposed of at a local landfill (WRS 2014).

As discussed under Impact 4.13.12, local landfills have remaining capacity to serve cumulative development identified in Table 3.0-1. In addition, the landfill that would receive refuse from the proposed Project (i.e. the Allied Imperial Landfill), has a remaining capacity of approximately 15 million cubic yards (Hall 2013).

Therefore, during operation, the proposed Project would have a **less than cumulatively** considerable contribution to the cumulative solid waste impacts. In addition, solar energy projects do not generate large volumes of waste (based on the small number of employees and nature of the operation) and would not substantially increase demand for solid waste services or disposal. Likewise, cumulative operational impacts to solid waste service and landfill capacity when taking into account the Full Build-out Scenario as well as each of the 17 individual CUPs proposed as part of the Phased CUP Scenario are considered **less than cumulatively considerable**.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP areas would be restored to pre-Project soil conditions. Decommissioning activities are similar to construction activities and are not anticipated to last as long as the construction activities. Similar to construction, decommissioning would result in the generation of recyclable and non-recyclable solid waste materials. Most of the materials during decommissioning are steel, copper, and solar panels which will be recycled/disposed of according to a restoration plan (WRS 2014). Therefore, during Project decommissioning, cumulative impacts to solid waste service and landfill capacity would be anticipated to be **less than cumulatively considerable** when considering the Full Build-out Scenario as well as each of the 17 individual CUPs.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

4.13.6 ELECTRICITY

4.13.6.1 REGULATORY FRAMEWORK

A. LOCAL

Imperial County General Plan

The Imperial County General Plan Land Use Element contains one goal and one objective that relate to electricity associated with the proposed Project. **Table 4.13-5** provides a consistency analysis of the applicable Imperial County General Plan goal and objective as they relate to the proposed Project. While this EIR analyzes the Project's consistency with the General Plan pursuant to CEQA Guidelines section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

TABLE 4.13-5
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS - ELECTRICITY

General Plan Goal and Objective	Consistent with General Plan?	Analysis
LAND USE ELEMENT		
Public Facilities		
Goal 8 Coordinate local land use planning activities among all local jurisdictions and state and federal agencies.	Yes	The proposed Project is being planned and designed in coordination with the County of Imperial as well as state and federal agencies as appropriate. Examples include but are not limited to the California Department of Fish and Wildlife, IID Water, IID Energy, Imperial County Planning and Development Services Department, Imperial County Public Works Department, Imperial County Air Pollution Control District, local landowners, and other solar project developers. Therefore, the proposed Project is consistent with this goal.
Objective 8.8 Ensure that the siting of future facilities for the transmission of electricity, gas, and telecommunications is compatible with the environment and County regulation.	Yes	The proposed Project is compatible with the environment as evidenced by the presence of existing electrical infrastructure (i.e. Mount Signal Solar Gen-Tie line). The proposed Project is an allowed use on parcels designated for "Agricultural" uses and zoned either A-2 (Agricultural General), A-2-R (General Agricultural Rural Zone), or A-3 (Heavy Agriculture) with approval of a CUP. The Applicant has applied for 17 CUPs to develop the proposed solar facilities. In addition, the Project has requested one

TABLE 4.13-5
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS - ELECTRICITY

General Plan Goal and Objective	Consistent with General Plan?	Analysis
		variance for each of the 17 CUP applications because the proposed Gen-Tie structures would reach over 120 feet in height. Therefore, the proposed Project is consistent with this objective.

4.13.6.2 EXISTING SETTING

IID provides the primary electrical service for residential, commercial, and industrial customers in the vast majority of Imperial County and the Coachella Valley area of Riverside County. A small area in the northeastern portion of the County is served by Southern California Edison. IID currently provides electricity to the Project area.

IID's generating facilities and sources of power are varied and dispersed across the County. The main generating facilities are El Centro (180 megawatt [MW]), Brawley (18 MW), Rockwood (50 MW), and Coachella (80 MW). Hydroelectric facilities along the All American Canal have a maximum capacity of 45 MW. The facilities are also located within 15 miles of each other with the exception of the Coachella plant and the hydroelectric facilities (Imperial County 1993b, p. 19-20).

IID's transmission system consists primarily of 161 kilovolt (kV) and 92 kV transmission lines and lower voltage distribution lines. IID also has two 230-kV transmission lines that allow for import/export of electrical power to its system in the County. San Diego Gas & Electric (SDG&E)/IID operate a 500 kV transmission line that traverses the southern part of Imperial County and interconnects with the transmission system in Arizona. This 500 kV transmission line is the primary import line for electrical power to be wheeled into SDG&E's system to supply power to San Diego County and the City of San Diego. This line also provides import/export capacity to IID's service area (Imperial County 2006, p. 21).

4.13.6.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the CEQA Guidelines Appendix G thresholds of significance. The proposed Project would have a significant impact to electrical service if it would:

a) Result in the need for new systems or supplies of electricity, or a substantial expansion or alteration to electrical infrastructure that results in a physical impact on the environment.

B. METHODOLOGY

The analysis of impacts to electricity and electrical infrastructure was based on information provided by the Applicant and correspondence with the IID.

C. IMPACTS AND MITIGATION MEASURES

Impacts to Electrical Service and Facilities

Impact 4.13.14 The proposed Project would increase the demand for electrical services from IID for the operating the O&M building(s) and keeping inverters warm during the evening hours.

Within its on-site disturbance area, the Project includes a substation feedback and transmission interconnection coordinated with IID through an Affected Systems Agreement and Backfeed and Station Power Service Agreement. No permanent expansion of IID electrical infrastructure is necessary for the proposed Project. Thus, the proposed Project's impacts to electricity and electrical infrastructure are **less than significant**.

FULL BUILD-OUT SCENARIO/ALL CUPS (13-0036 THRU 13-0052)

Construction, Operation, Maintenance, and Decommissioning

The Project proposes to use propane or diesel generator power for temporary portable construction trailer(s), and construction and decommissioning work where on-site electrical lines are not available (WRS 2014). At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP areas would be restored to pre-Project soil conditions. Collector lines would be decommissioned with the associated CUP.

During operation, the Project would need to collect electricity from the various CUPs through the Electric Collector Line Corridor. Electricity conveyed through the Electric Collector Line Corridor would eventually be transmitted through the Mount Signal Solar Farm Gen-Tie. The collector line corridor and Gen-Tie would include both electric line crossings of IID facilities and crossings of Caltrans facilities for a total of 34 crossings, either electric or both electric and vehicular. The Project crossings would not interfere with the purpose of the IID or Caltrans facilities.

IID does not have electric infrastructure in place to provide electric service to operate the proposed Project. However, no electric infrastructure is needed because the Project will generate its own power supply during the day. The transmission facilities proposed by the Project to export power would be used to supply a backfeed of power to the Solar Energy Center from IID in the evening hours to operate the O&M building(s) and keep the inverters warm. The financial arrangements with IID are coordinated through an Affected Services Agreement and Backfeed and Station Power Service Agreement. These agreements require the Applicant to be responsible for obtaining a power supply from market sources delivered over CAISO-operated facilities and for all costs and expenses associated with delivery. The agreements also set forth a contract rate (currently $67.00 per MWh) to be paid for energy. IID has developed a proforma Affected Services Agreement and Backfeed and Station Power Service Agreement and the Project's agreements will generally conform to those proforma agreements.

The foregoing demonstrates that no physical expansion or alteration to IID's existing electric infrastructure will be required to accommodate the proposed Project. The facilities are powered through the Project's proposed design during operation. No electricity would be necessary upon Project decommissioning. Therefore, construction, operation and maintenance-related impacts on electricity and electrical infrastructure are **less than significant** when taking into account the Full Build-out Scenario as well as each of the 17 individual CUPs proposed as part of the Phase CUP Scenario.

Mitigation Measures

None Required.

Significance After Mitigation

Not Applicable.

4.13.6.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The cumulative setting for electrical service is IID's service area, which encompasses almost all of Imperial County. Only a small portion of the northeast corner of the County receives service from Southern California Edison. The proposed Project and all proposed, approved and reasonably foreseeable projects in the County of Imperial identified in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis, are within IID's service area.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Impacts to Electric Service

Impact 4.13.15 Implementation of the proposed Project, in combination with proposed, approved and reasonably foreseeable projects in the County of Imperial, would result in a minimal increase in the current use of IID electricity and a substantial increase in solar energy generation. Therefore, cumulative impacts to electrical service are considered **less than cumulatively considerable**.

FULL BUILD-OUT SCENARIO/ ALL CUPS (13-0036 THRU 13-0052)

Construction

The proposed Project, in combination with other proposed, approved and reasonably foreseeable projects in the County of Imperial in Table 3.0-1, as well as cumulative build-out of Imperial County, would obtain power from propane and diesel generators where on-site electrical lines are not available to power construction trailers and construction and decommissioning work.

The proposed Project, as well as the projects identified in Table 3.0-1, may contribute to electricity demands in IID's service area during construction. However, once operational, the proposed Project would also generate a substantial amount of electricity for sale to the electrical grid. Therefore, the proposed Project would result in a beneficial contribution to electrical service through the addition of electricity to the IID grid.

Thus, the proposed Project, in combination with other proposed, approved and reasonably foreseeable projects, in the County of Imperial would generate electricity, providing additional power to the IID electrical grid. Therefore, cumulative impacts to electric service during Project construction are considered **less than cumulatively considerable** for both the Full Build-Scenario as well as each of the 17 individual CUPs proposed as part of the Phased CUP Scenario.

Operation

IID does not have electric infrastructure in place to provide electric service to operate the proposed Project and some of the projects identified in Table 3.0-1. However, no electrical infrastructure is needed because the Project and the solar projects identified in Table 3.0-1 will generate their own power supply during the day. The transmission facilities proposed by the Project, and other solar projects identified in Table 3.0-1, to export power are then used to supply a backfeed of power to these projects from IID in the evening hours to operate the O&M buildings and keep the inverters warm. The financial arrangements for each project are coordinated with IID through an Affected Services Agreement and Backfeed and Station Power Service Agreement. These agreements require the applicants to be responsible for obtaining a power supply from market sources delivered over CAISO-operated facilities and for all costs and expenses associated with delivery. The agreements also set forth a contract rate (currently $67.00 per MWh) to be paid for energy. IID has developed a proforma

Affected Services Agreement and Backfeed and Station Power Service Agreement and the Project's agreements will generally conform to those proforma agreements.

The foregoing demonstrates that no physical expansion or alteration to IID's existing electric infrastructure will be required to accommodate the proposed Project. The facilities are powered through the proposed Project's design and designs of the solar projects identified in Table 3.0-1.

In addition, during operation, the proposed Full Build-out Scenario would contribute approximately 250 MW, or approximately 20 MW each CUP. Likewise, the amount of electricity required by the proposed Full Build-out Scenario or each individual CUP (13-0036 thru 13-0052) would be more than off-set by the 250 MW the Project would generate.

While the proposed Project, as well as the projects identified in Table 3.0-1, will contribute to electricity demands in IID's service area, these solar energy generation facilities would also generate a substantial amount of electricity for sale to the electrical grid. Therefore, the proposed Project, and each individual solar energy generation facility identified in Table 3.0-1, would result in a beneficial contribution to electrical service through the addition of electricity to the IID grid.

Overall, the proposed Project, in combination with other proposed, approved and reasonably foreseeable solar energy electrical generation facilities in the County of Imperial would generate electricity, providing additional power to the IID electrical grid without physical expansion or alteration to IID's existing electric infrastructure. Therefore, cumulative impacts to electric service during Project operation are considered **less than cumulatively considerable** for both the Full Build-Scenario as well as each of the 17 individual CUPs proposed as part of the Phased CUP Scenario.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP areas would be restored to pre-Project soil conditions. Collector lines would be decommissioned with the CUP (Ferrara 2014b). Therefore, cumulative impacts to electric service during Project decommissioning are considered **less than cumulatively considerable** for both the Full Build-Scenario as well as each of the 17 individual CUPs proposed as part of the Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not Applicable.

4.13.7 TELEPHONE/INTERNET

4.13.7.1 REGULATORY FRAMEWORK

A. LOCAL

Imperial County General Plan

The Imperial County General Plan does not contain any goals, objectives, policies or programs pertaining to telecommunications that are applicable to the proposed Project.

4.13.7.2 EXISTING SETTING

The solar field site parcels currently consist of agricultural land that is void of structures with the primary exception of IID and landowner irrigation facilities. As such, a telecommunications provider does not currently serve the Project.

4.13.7.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the CEQA Guidelines Appendix G thresholds of significance for Utilities and Service Systems. The proposed Project would have a significant impact to telecommunication service if it would:

a) Result in the need for new telecommunications systems, or a substantial expansion or alteration to telecommunication infrastructure that results in a physical impact on the environment.

B. METHODOLOGY

The analysis of impacts to telephone and internet service was based on information provided by the Applicant.

C. IMPACTS AND MITIGATION MEASURES

Impacts to Telephone and Internet Service

Impact 4.13.16 The proposed Project and surrounding area is not currently served by telecommunications service. The proposed Project would increase the demand for telephone and internet services. AT&T is anticipated to provide service to the Project as needed in accordance with all applicable fees. Therefore, impacts to telephone and internet service are considered **less than significant**.

FULL BUILD-OUT SCENARIO/ALL CUPS (13-0036 THRU 13-0052)

Construction, Operation

During construction and operation, the Project is anticipated to utilize telephone and internet services provided by AT&T. The Applicant would be responsible for contacting AT&T to request service and pay all applicable fees. Telephone and internet service is provided and approved on a project-by-project basis. Therefore, impacts to telephone and internet service are considered **less than significant** when considering the Full Build-out Scenario as well as each of the 17 individual CUPs proposed as part of the Phased CUP Scenario.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP areas would be restored to agricultural use (i.e. pre-Project soil conditions) and telephone and internet services would no longer be needed. Therefore, during Project decommissioning, impacts to telephone and internet services would be anticipated to be **less than significant** when considering the Full Build-out Scenario as well as each of the 17 individual CUPs proposed as part of the Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not Applicable.

4.13.7.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The cumulative setting for telephone and internet services is AT&T's service area in Imperial County. All of the cumulative projects identified in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis, within Imperial County are within AT&T's service area. However, other projects within the cumulative projects list may be served by other private companies offering high speed internet and telephone.

B. CUMULATIVE IMPACTS

Cumulative Impacts to Telephone and Internet Services

Impact 4.13.17 Implementation of the proposed Project, in combination with other existing, proposed, approved and reasonably foreseeable development, would result in cumulative demands to telephone and internet service. Telecommunication service providers procure service to individual development projects on an as-needed basis. Therefore, cumulative impacts to telephone and internet services are considered **less than cumulatively considerable**.

FULL BUILD-OUT SCENARIO/ALL CUPS (13-0036 THRU 13-0052)

Construction, Operation

AT&T as well as other internet and telephone service providers would provide service to individual projects on an as-needed basis. Infrastructure can be built or extended to service new projects as necessary. Therefore, the proposed Project's contribution to cumulative impacts to telephone and internet services is considered **less than cumulatively considerable**. Likewise, because service can be provided on an as-needed basis, cumulative impacts to telephone and internet services are considered **less than cumulatively considerable**.

Decommissioning

At the end of the Project's operational life, the components of the Solar Energy Center would be removed and decommissioned and the CUP areas would be restored to agricultural use (i.e. to pre-Project soil conditions) and telephone and internet services would no longer be needed. Therefore, during decommissioning of the Project, cumulative impacts to electrical service and facilities would be anticipated to be **less than cumulatively considerable** when considering the Full Build-out Scenario as well as each of the 17 individual CUPs proposed as part of the Phased CUP Scenario.

Mitigation Measures

None required.

Significance After Mitigation

Not Applicable.