2.4 Hazards and Hazardous Materials

This section discusses potential impacts relating to hazards and hazardous materials resulting from the implementation of the Proposed Project. The analysis is based on the review of existing resources, technical data, and applicable laws, regulations, and guidelines, as well as the following technical reports prepared for the Proposed Project, in conformance with the County of San Diego (County) Report Requirements or other applicable standards.

- Phase I Environmental Site Assessment Jacumba (Appendix 2.4-1)
- Draft Fire Protection Plan – Jacumba Solar Energy Project (Appendix 2.4-2)

For a discussion on the Proposed Project's impacts on public services, refer to Section 3.1.6, Public Services.

This section is divided into an analysis of potential hazards to public safety and the environment related to hazardous materials, airports, emergency response and evacuation plans, and wildland fire. The discussion of hazards and hazardous materials describes sites with known hazardous materials contamination, sites with potential hazardous materials contamination, hazardous materials transportation, hazardous materials disposal, and hazardous materials release threats. The discussion of airports examines existing airport facilities and potential operational hazards within the County, and specifically within the Proposed Project area. The discussion of emergency response and evacuation plans identifies operations and plans that exist to protect lives and property in the event of a disaster within the County. The wildland fires analysis examines fire threat hazards, the potential for wild fires in the Proposed Project area wildland–urban interface areas and project impacts on fire and emergency services response times. Additionally, information contained in the previously listed technical reports was used in the preparation of the analysis below.

Comments received in response to the Notice of Preparation (NOP) included concerns regarding potential for glare to affect gliders using the Jacumba Airport. These concerns are addressed in this section and glare is also analyzed as part of the analysis provided in Section 2.1, Aesthetics, of this EIR. A copy of the NOP and comment letters received in response to the NOP is included in Appendix 1-1 of this EIR.

Recognizing there is some public interest regarding potential health effects and hazards from exposure to electric and magnetic fields (EMFs), this section also provides information regarding these potential issues. However, this section does not consider EMFs in the context of the California Environmental Quality Act (CEQA) for determination of environmental impact because the available evidence as evaluated by the California Public Utilities Commission (CPUC) and other regulatory agencies has not established that such fields pose a significant

health hazard to exposed humans and because there are no defined or adopted CEQA standards for defining health risks from EMFs. As a result, the EMF information is presented for informational purposes to the public and decision makers.

2.4.1 Existing Conditions

Regional Overview

The Proposed Project is located in a rural area with a history of agriculture, burning of refuse, and dumping, and with a high potential for wildland fire risk (CAL FIRE 2012). Other potential hazards include exposure to hazardous materials through transportation and disposal of these materials during construction of the Proposed Project, air traffic hazards from Jacumba Airport (used by gliders), and hazards associated with interference with emergency response which may occur within existing rights-of-way during construction. The conditions, as described below, pose the risk of exposure to hazardous materials or hazardous conditions on the site, or to/from adjacent sites.

Hazardous Materials

Hazardous materials may be encountered during construction activities. Hazardous materials typically require special handling, reuse, and disposal because of their potential to harm human health and the environment. The California Health and Safety Code, Section 25501, defines a hazardous material as:

> Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Potential Hazardous Materials Associated with Historical Land Uses

A variety of historical land uses and conditions in the Proposed Project area or nearby sites could potentially result in site contamination, representing potential hazards to humans and the environment when new land uses are proposed on those lands. Examples of historical land uses in rural areas that have the potential to result in current site contamination include:

- **Burn Dump Sites** – Burn ash refers to the debris, refuse, ash, and ash-contaminated soil that result from the open burning of municipal solid waste. Burn dump sites refer to

locations where the open burning of solid waste occurred. Burn ash can be commingled with other solid wastes, including incompletely burned refuse. Burn ash may contain concentrations of heavy metals, such as lead, that may be a potential risk to human health and, if excavated, may need to be disposed as either a California or Resource Conservation and Recovery Act (RCRA) hazardous waste.

- **Landfills** – Active, abandoned, and closed landfills present potential issues related to the exposure of humans to hazards, such as landfill gas migration, when a project is proposed on or near a landfill site.
- **Historical Agriculture** – Agricultural activities include the application of fertilizers, herbicides, and pesticides that have the potential to contaminate soil and groundwater. Soils contaminated by past agricultural activities are a growing concern, generally because of land use changes involving proposed housing developments on former agricultural lands.
- **Petroleum** – Petroleum hydrocarbons are the most commonly used group of chemicals in society today. Petroleum hydrocarbons encompass a wide range of compounds, including but not limited to fuels, oils, paints, dry cleaning solvents, and non-chlorinated solvents. These compounds are used in all facets of modern life and can cause soil and groundwater contamination if not properly handled. Underground storage tanks (USTs) and aboveground storage tanks (ASTs) that store petroleum are common sources of contamination into soils and groundwater in the County (County of San Diego 2011a).

As part of the Phase I Environmental Site Assessment prepared for the Proposed Project (Appendix 2.4-1), a history of the site was compiled based on the review of historical aerial photographs and topographic maps, agency records, County Directory listings, building permit reports, and a site owner/representative interview. The research revealed that the site has not been previously developed or used and has remained in similar condition as it exists in today.

The gen-tie route is less than half a mile in length and crosses a portion of one Assessor's Parcel Number. The gen-tie route site consists of undisturbed land and crossing the East County (ECO) Substation driveway. No portion of the gen-tie route includes a groundwater well, septic system, chemical or petroleum storage, or an impacted fuel spill site.

The Phase I Environmental Site Assessment identified no recognized environmental conditions or potential sources of hazardous materials or contamination on the Project properties.

Hazardous Waste Transportation

In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by the Department of Toxic Substances

Control. The Department of Toxic Substances Control maintains a list of active registered hazardous waste transporters throughout the state. The process of transporting hazardous waste often involves transfer facilities. A transfer facility is any facility that is not an on-site facility that is related to the transportation of waste. These facilities include but are not limited to, loading docks, parking areas, storage areas, and other similar areas. Although not all transfer facilities hold hazardous waste, any operator of a facility that accepts hazardous waste for storage, repackaging, or bulking must obtain formal authorization for those activities through the hazardous waste permit process. Hazardous waste transporters are exempt from storage facility permit requirements so long as they observe the limits on storage time and handling.

Hazardous Materials Disposal

Through the RCRA, Congress directed the U.S. Environmental Protection Agency (EPA) to create regulations that manage hazardous waste from "the cradle to the grave." Under this mandate, the EPA has developed strict requirements for all aspects of hazardous waste management, including the recycling, treatment, storage, and disposal of hazardous waste. Facilities that provide recycling, treatment, storage, and disposal of hazardous waste are referred to as treatment, storage, and disposal facilities. Regulations pertaining to these facilities are designed to prevent the release of hazardous materials into the environment and are more stringent than those that apply to generators or transporters. Within the unincorporated County, multiple treatment, storage, and disposal facility sites exist, such as those owned and operated by the U.S. military and San Diego Gas & Electric (SDG&E).

Airport Hazards

Airport Land Use Compatibility Plans (ALUCPs) are plans that guide property owners and local jurisdictions in determining what types of proposed new land uses are appropriate around airports. Airport safety zones are established for all public airports as part of the ALUCP, and land use restrictions within safety zones are established to protect people and property on the ground and in the air. Main areas of concern related to airport hazards include overflight safety, airspace protection, flight patterns, and land use compatibility. Hazards associated with airports can have serious human safety and quality of life impacts. Aviation facilities provide a variety of aviation services to local residents, including civil aviation, government use, business flights, charter flights, flight schools, and helicopter operations.

The nearest registered airport is the Jacumba Airport located approximately 1.5 miles west of the Project site. The Project site is within Airport Influence Area 2 of the Jacumba Airport (AIA). The airport is unattended and unlighted and is mainly used as a glider facility by single-engine aircraft and sailplanes, with activity predominately occurring during weekends in non-summer

months. In 2011, 800 operations occurred at the Jacumba Airport. No aircraft are based at the Jacumba Airport (County of San Diego 2012a).

There are no active private airstrips within the vicinity of the Project site.

Wildfire Hazards

A vast amount of the County's undeveloped lands support natural habitats such as grasslands, sage scrub, chaparral, and some coniferous forest. In the context of fire ecology, these areas are known as wildlands. Fire ecology research has shown that the natural fire regime for the shrublands and forests in the County was one of frequent small fires and occasional large fires. Modern society has interrupted and fractured the natural fire process by initiating fire suppression policies, introducing invasive plant species that burn readily such as eucalyptus trees, and building houses within or adjacent to wildland areas (wildland–urban interface areas) such as the County's backcountry. Although fires can occur anywhere in the County, fires that begin in wildland areas pose a threat to personal safety and structures due to rapid spread and the extreme heat that these fires often generate. Past wildfires have taken lives and destroyed homes.

The Proposed Project is located in an area classified as Very High Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection (CAL FIRE) (Appendix 2.4-2). Fire hazard designations are based on topography, vegetation, and weather, amongst other factors that indicate the likelihood of wildfire occurrence. The Proposed Project site is located in an area dominated by semi-desert chaparral vegetation, which is a vegetation community that experiences occasional wildfire and can burn in an extreme manner under windy, dry conditions. The terrain on and within the vicinity of the Proposed Project site is predominantly flat to gently rolling. The Proposed Project area, like all of inland San Diego County, is subject to seasonal weather conditions that can heighten the likelihood of fire ignition and spread. Santa Ana winds are winds originating from the Great Basin that create extreme fire weather conditions characterized by low humidity, sustained high speeds, and extremely strong gusts. These conditions can lead to extremely intense and fast-moving fires.

The County has a long history of wildland fires. As identified in an annual report produced by CAL FIRE called "Wildfire Activity Statistics," the County is consistently listed among the top five counties in the state for both number of acres burned and dollar value of fire damage. In the County, fire season is typically defined from May through November, depending on variations in weather conditions. However, the threat of a wildland fire is always present and is influenced by weather conditions throughout the year. In 2011, 196 fires in San Diego County burned a combined 17,439 acres, the largest amount of acres burned per County in California in 2011 (CAL FIRE 2012).

The fire environment in southeastern San Diego County is considered one of several areas that are classified as "wildfire corridors." The wildfire corridor includes a consistent and continuous fuel bed that extends from extreme east County to the urban areas of Alpine, El Cajon, and Chula Vista to the west. Although the area is subject to occasional wildfire ignitions, a large portion of the fuel bed has not burned in 40 or more years. This situation is considered to result in the potential for catastrophic wildfire under extreme weather conditions (Appendix 2.4-2).

Based on the region's fuels, fire history, and expected fire behavior, a high-intensity fire can be expected to occur in the Proposed Project area at some point in the future, whether it is started by natural or man-made causes. Fire behavior in the Proposed Project area can be extreme with intense heat, above average flame lengths, fast spread, and spotting, thus causing a hazard both on and off the Proposed Project site. For information on fire protection services in the Proposed Project area, see Section 3.1.6, Public Services.

Hazards Associated with Interference with Emergency Responses

County of San Diego Department of Environmental Health, Hazardous Incident Response Team

The County of San Diego Department of Environmental Health, Hazardous Incident Response Team (DEH-HIRT) is the local agency that is responsible for responding to chemically related emergencies or complaints. DEH-HIRT consists of 10 California State Certified Hazardous Materials Specialists. The team was founded in 1981 by the Unified Disaster Council and is funded by a Joint Powers Agreement. This team services all unincorporated San Diego County areas, 18 municipalities, 2 military bases, and 5 Indian reservations. There are over 400 responses a year in the DEH-HIRT operational area. DEH-HIRT responds jointly with the San Diego Fire-Rescue Department Hazardous Incident Response Team to investigate and mitigate chemically related emergencies or complaints. Emergency response activities include mitigation, containment, control actions, hazard identification, and threat evaluation to the local population and the environment. DEH-HIRT is also responsible for handling all after normal business hours complaints for the DEH (County of San Diego 2012b).

Emergency/Evacuation Plans

Emergency response plans include elements to maintain continuity of government, emergency functions of governmental agencies, mobilization and application of resources, mutual aid, and public information. Emergency response plans are maintained at the federal, state, and local level for all types of disasters, including human-made and natural. Local governments have the primary responsibility for preparedness and response activities. In San Diego County, there is a comprehensive emergency plan known as the Operational Area Emergency Plan as well as numerous stand-alone emergency plans, including the Multi-Jurisdictional Hazard Mitigation

Plan. Potential hazards or events that may trigger an emergency response action in the County include earthquakes, tsunamis, floods, wildland fires, landslides, droughts, hurricanes, tropical storms and freezes. Emergency response actions could also be triggered from a hazardous material incident, water or air pollution, a major transportation accident, water, gas, or energy shortage, an epidemic, a nuclear accident, or terrorism.

Wildfire Hazards

As discussed above, the Proposed Project site is located within an area classified as Very High Fire Hazard Severity Zone by CAL FIRE (Appendix 2.4-2). Vegetation on the site and adjacent sites is dominated by chaparral species, which represent fuels that would spread wildfire on and off the site. Based on the region's fuels, fire history, and expected fire behavior, a high-intensity fire can be expected to occur in the area that would be considered a hazard to the site and surrounding properties (Dudek 2013).

Hazards Associated with Interference with Emergency Responses

The site is undeveloped and presents no interference with implementation of emergency responses in the area. The approximate response time to the Proposed Project facilities from the Jacumba Fire Station is 9 minutes. This response time is compliant with the General Plan travel time requirements for rural land use zoning, which allow in excess of 20 minutes (see Appendix 2.4-2).

Emergency medical response cannot be separated from fire protection response services because the first responders to emergency medical responses are usually fire response units. ~~American Medical Response (AMR)~~Mercy Medical Transportation, Inc. (Mercy) San Diego is the contracted ambulance service provider for the Proposed Project area. ~~AMR's~~ Mercy's closest stationed ambulance location within the Proposed Project area is at ~~1390 Dewey Place in Campo (ARM San Diego 2012)~~the Boulevard Fire Station (40080 Ribbonwood Road). Mercy has two ambulances in Alpine, allowing for one unit to move out to Campo to cover a call. Another ambulance is stationed at the ~~Cal Fire~~CAL FIRE San Diego Rural station in Jamul, as well as two ambulances at the ~~Cal Fire~~CAL FIRE/County Fire station in Otay Mesa.

For more information on fire protection in the Proposed Project area and applicable fire protection laws and regulations, see Appendix 2.4-2, Draft Fire Protection Plan – Jacumba Solar Energy Project.

2.4.2 Regulatory Setting

Numerous federal, state, and local regulations have been enacted to prevent or mitigate damage to public health and safety and the environment from the release or threatened release of hazardous substances into the workplace or environment, to protect human health and

environmental resources from existing site contamination, and to protect human health and safety from the threat of an emergency, including fire. The regulations below are relevant to the Proposed Project and the topics of hazardous substances, site contamination, and potential emergencies on the site.

Federal Regulations

Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984

Federal hazardous waste laws are generally promulgated under RCRA. RCRA establishes a framework for national programs to achieve environmentally sound management of both hazardous and non-hazardous wastes. RCRA was designed to protect human health and the environment, reduce/eliminate the generation of hazardous waste, and conserve energy and natural resources. RCRA also promotes resource recovery techniques. The Hazardous and Solid Waste Amendments of 1984 both expanded the scope of RCRA and increased the level of detail in many of its provisions. The Hazardous Waste Management subchapter of the RCRA deals with a variety of issues regarding the management of hazardous materials including the export of hazardous waste, state programs, inspections of hazardous waste disposal facilities, enforcement, and the identification and listing of hazardous waste.

Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act of 1986

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, on December 11, 1980. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations; provided new enforcement authorities and settlement tools, increased state involvement in every phase of the Superfund program, increased the focus on human health problems posed by hazardous waste sites, encouraged greater citizen participation in making decisions on how sites should be cleaned up, and increased the size of the trust fund to $8.5 billion.

Chemical Accident Prevention Provisions

When Congress passed the Clean Air Act Amendments of 1990, it required the EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. These rules, which built upon existing industry codes and standards, require companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act, also known as SARA Title III, was enacted in October 1986. The act was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. These concerns were triggered by the disaster in Bhopal, India, in which more than 2,000 people suffered death or serious injury from the accidental release of methyl isocyanate. To reduce the likelihood of such a disaster in the United States, Congress imposed requirements on both state and federally regulated facilities. SARA Title III establishes requirements for federal, state, and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The act requires states and local emergency planning groups to develop community emergency response plans for protection from a list of Extremely Hazardous Substances (40 CFR 355, Appendix A). The community right-to-know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. In California, SARA Title III is implemented through the California Accidental Release Prevention (CalARP) program.

Hazardous Materials Transportation Act

The U.S. Department of Transportation regulates hazardous materials transportation under Title 49 of the Code of Federal Regulations (CFR). State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation (Caltrans). These agencies also govern permitting for hazardous materials transportation.

EPA Region 9, Preliminary Remediation Goals

Region 9 is the Pacific Southwest Division of the EPA, which includes Arizona, California, Hawaii, Nevada, the Pacific Islands, and over 140 Tribal Nations. Preliminary Remediation Goals are tools for evaluating and cleaning up contaminated sites. Preliminary Remediation Goals for the Superfund/RCRA programs are risk-based concentrations, derived from standardized equations combining exposure information assumptions with EPA toxicity data.

They are considered to be protective for humans (including sensitive groups) over a lifetime. However, Preliminary Remediation Goals are not always applicable to a particular site and do not address non-human-health issues, such as ecological impacts. Region 9's Preliminary Remediation Goals are viewed as agency guidelines, not legally enforceable standards.

Federal Aviation Administration Functions

The Federal Aviation Administration (FAA) has primary responsibility for the safety of civil aviation. The FAA's major functions regarding hazards include the following: (1) developing and operating a common system of air traffic control and navigation for both civil and military aircraft, (2) developing and implementing programs to control aircraft noise and other environmental effects of civil aviation, (3) regulating U.S. commercial space transportation, and (4) conducting reviews to determine that the safety of persons and property on the ground are protected.

An FAA report titled *Technical Guidance for Evaluating Selected Solar Technologies on Airports* (FAA Solar Guide) was prepared to provide the FAA with procedures for reviewing solar projects (FAA 2010). The FAA Solar Guide includes the following content:

- Chapter 1 provides an introduction to solar electricity and how it is delivered to customers. It includes a description of solar photovoltaic (PV) technology, which is one of the more practical applications for airports, other types of solar energy systems, how systems connect and operate with the electric grid, and the specific electricity supply and demand issues associated with solar projects at airports.
- Chapter 2 reviews airport site planning issues including the life cycle of a typical solar PV project, project participants, and airport planning considerations for locating solar facilities at airports (e.g., Airport Layout Plan consistency).
- Chapter 3 examines the regulatory issues that FAA must consider, including Title 14 of the CFR Part 77 (Airspace Review) and obligations under the National Environmental Policy Act (NEPA).
- Chapter 4 describes the financial landscape for solar projects including the government incentives available to fund projects and how the different ownership models (e.g., public versus private) can maximize project cost-effectiveness.
- Chapter 5 reviews the federal government's role in solar development and includes recommendations for future research and procedural efficiency.

As of June 26, 2012, the FAA is reviewing Section 3.1.2, Reflectivity, of the FAA Solar Guide, based on new information and field experience. The FAA cautions users against relying solely on this section at this time as it may be subject to change (FAA 2010). The FAA provided an

Interim Policy on October 23, 2013, regarding review of solar energy system projects on federally obligated airports; however, it does not address off-airport facilities.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that (1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; (2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and (3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency.

State Regulations

Hazardous Materials

California Government Code Section 65962.5 (a), Cortese List

The Hazardous Waste and Substance Sites (Cortese) List is a planning document used by the state, local agencies, and developers to comply with the CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop at least annually an updated Cortese List. The Department of Toxic Substances Control is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

Hazardous Materials Business Plans

Article 1 of Chapter 6.95 of the California Health and Safety Code (Sections 25500–25520) requires that any business that handles, stores, or disposes of a hazardous substance at a given threshold quantity must prepare a hazardous materials business plan (HMBP). HMBPs are intended to minimize hazards to human health and the environment from fires, explosions, or an unplanned release of hazardous substances into air, soil, or surface water. The HMBP must be carried out immediately whenever a fire, explosion, or unplanned chemical release occurs. An HMBP includes three sections: (1) an inventory of hazardous materials, including a site map, which details their location; (2) an emergency response plan; and (3) an employee-training program. HMBPs serve as an aid to employers and employees in managing emergencies at a

given facility. They also help better prepare emergency response personnel for handling a wide range of emergencies that might occur at the facility.

HMBPs are submitted to the Department of Environmental Health Hazardous Materials Division. The plans must be resubmitted, reviewed, revised, or amended as necessary every 3 years. The HMBP must also be amended within 30 days whenever there are changes in the amount or location of stored hazardous chemicals on a site. The Hazardous Materials Division conducts routine inspections at businesses required to submit business plans. The purpose of these inspections is to (1) ensure compliance with existing laws and regulations concerning HMBP requirements, (2) identify existing safety hazards that could cause or contribute to an accidental spill or release, and (3) suggest preventative measures designed to minimize the risk of a spill or release of hazardous materials. After initial submission of an HMBP, the business must review and recertify the HMBP every year.

Risk Management Plans

Article 2 of Chapter 6.95 of the California Health and Safety Code (Sections 25531–25543.3) requires the owner or operator of a stationary source (non-transporation) with more than a threshold quantity of a regulated substance to prepare a risk management plan. The state statutes and regulations combine federal and state program requirements for the prevention of accidental releases of listed substances into the atmosphere. The incorporation of the federal and state requirements have been designated the CalARP program. CalARP requires that a risk management plan include a hazard assessment program, an accidental release prevention program, and an emergency response plan. The risk management plan must be revised every 5 years or as necessary. The majority of facilities or businesses in the County that have prepared risk management plans are ammonia refrigeration facilities, water treatment and wastewater treatment plants that handle chlorine gas and facilities that store flammable chemicals such as methane and propane.

Title 22 of the California Code of Regulations and Hazardous Waste Control Law, Chapter 6.5

The Department of Toxic Substances Control regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under RCRA and the California Hazardous Waste Control Law. Both laws impose "cradle-to-grave" regulatory systems for handling hazardous waste in a manner that protects human health and the environment. CalEPA has delegated some of its authority under the Hazardous Waste Control Law to county health departments and other Certified Unified Program Agencies, including the San Diego County DEH.

Title 23 of the California Code of Regulations, Underground Storage Tank Act

The underground storage tank monitoring and response program is required under Chapter 6.7 of the California Health and Safety Code and Title 23 of the California Code of Regulations. The program was developed to ensure that the facilities meet regulatory requirements for design, monitoring, maintenance, and emergency response in operating or owning underground storage tanks. The County DEH is the local administering agency for this program.

Title 27 of the California Code of Regulations, Solid Waste

Title 27 of the California Code of Regulations contains a waste classification system that applies to solid wastes that cannot be discharged directly or indirectly to waters of the state and which therefore must be discharged to waste management sites for treatment, storage, or disposal. The California Integrated Waste Management Board and its certified Local Enforcement Agency regulate the operation, inspection, permitting, and oversight of maintenance activities at active and closed solid waste management sites and operations.

California Human Health Screening Levels

The California Human Health Screening Levels (CHHSLs or "Chisels") are concentrations of 54 hazardous chemicals in soil or soil gas that CalEPA considers to be below thresholds of concern for risks to human health. The CHHSLs were developed by the Office of Environmental Health Hazard Assessment on behalf of CalEPA. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the EPA and CalEPA. The CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at concentrations below the corresponding CHHSL can be assumed to not pose a significant health risk to people who may live or work at the site. There are separate CHHSLs for residential and commercial/industrial sites.

Senate Bill 1889, Accidental Release Prevention Law/CalARP

Senate Bill (SB) 1889 required California to implement a new federally mandated program governing the accidental airborne release of chemicals promulgated under Section 112 of the Clean Air Act. Effective January 1, 1997, CalARP replaced the previous California Risk Management and Prevention Program and incorporated the mandatory federal requirements. CalARP addresses facilities that contain specified hazardous materials, known as "regulated substances," which if involved in an accidental release could result in adverse off-site consequences. CalARP defines regulated substances as chemicals that pose a threat to public health and safety or the environment because they are highly toxic, flammable, or explosive.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government, and private agencies. The plan is administered by the California Emergency Management Agency and includes response to hazardous materials incidents. The California Emergency Management Agency coordinates the response of other agencies, including CalEPA, California Highway Patrol, California Department of Fish and Wildlife, Regional Water Quality Control Board, San Diego Air Pollution Control District, the City of San Diego Fire Department, and DEH-HIRT.

California Fire Code

The California Fire Code (CFC) is Chapter 9 of Title 24 of the California Code of Regulations. It was created by the California Building Standards Commission and is based on the International Fire Code created by the International Code Council. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every 3 years.

Emergency Response

California Emergency Services Act

The California Emergency Services Act was adopted to establish the state's roles and responsibilities during human-made or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or the resources of the state. This act is intended to protect health and safety by preserving the lives and property of the people of the state.

California Natural Disaster Assistance Act

The California Natural Disaster Assistance Act provides financial aid to local agencies to assist in the permanent restoration of public real property, other than facilities used solely for recreational purposes, when such real property has been damaged or destroyed by a natural disaster. The California Natural Disaster Assistance Act is activated after the following occurs: (1) a local declaration of emergency; or (2) California Emergency Management Agency gives concurrence with the local declaration, or the governor issues a proclamation of a state

emergency. Once the act is activated, local government is eligible for certain types of assistance, depending upon the specific declaration or proclamation issued.

Wildfire Protection

Title 14 Division 1.5 of the California Code of Regulations

Title 14 of the California Code of Regulations, Division 1.5, establishes the regulations for CAL FIRE and is applicable in all State Responsibility Areas—areas where CAL FIRE is responsible for wildfire protection. Most of the unincorporated area of the County is a State Responsibility Area, and any development in State Responsibility Areas must comply with these regulations. Among other things, Title 14, Section 1270 et seq. establishes minimum standards for emergency access, fuel modification, setback to property line, signage, and water supply.

State Fire Regulations

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training. The state fire marshal enforces these regulations and building standards in all state-owned buildings, state-occupied buildings, and state institutions throughout California.

Local Regulations

San Diego County, Site Assessment and Mitigation Program

The County DEH maintains the Site Assessment and Mitigation list of contaminated sites that have previously or are currently undergoing environmental investigations and/or remedial actions. The County Site Assessment and Mitigation Program, within the Land and Water Quality Division of the DEH, has a primary purpose to protect human health, water resources, and the environment within the County by providing oversight of assessments and cleanups in accordance with the California Health and Safety Code and California Code of Regulations. The Site Assessment and Mitigation's Voluntary Assistance Program also provides staff consultation, project oversight, and technical or environmental report evaluation and concurrence (when appropriate) on projects, including properties contaminated with hazardous substances.

Jacumba Airport Land Use Compatibility Plan

The County of San Diego adopted the ALUCP for the Jacumba Airport in December 2006 and amended the plan in 2011 (County of San Diego 2011b). ALUCPs are plans that guide property owners and local jurisdictions in determining what types of proposed new land uses are

appropriate around airports. They are intended to protect the safety of people, property, and aircraft on the ground and in the air in the vicinity of the airport. They also protect airports from encroachment by new incompatible land uses that could restrict their operations. The Jacumba ALUCP defines an area around the airport as the AIA, which is established by factors including airport size, operations, and configuration, as well as the safety, airspace protection, noise, and overflight impacts on the land surrounding an airport. The Proposed Project is located within the AIA for Jacumba Airport, Airport Influence Area 2. Therefore, the Proposed Project is subject to the restrictions applicable to the AIA.

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

The County Multi-Jurisdictional Hazard Mitigation Plan is implemented by the County of San Diego Office of Emergency Services. The Multi-Jurisdictional Hazard Mitigation Plan is a County-wide plan that identifies risks posed by natural and man-made disasters and discusses ways to minimize potential damage occurring as a result of these disasters. The comprehensive plan is intended to serve many purposes, including enhancing public understanding and awareness of potential hazardous situations, creating a decision tool for managing hazards, promoting compliance with state and federal program requirements, enhancing local policies for hazard mitigation capability, providing inter-jurisdictional coordination, and achieving regulatory compliance (County of San Diego 2010a).

Operational Area Emergency Plan

The Office of Emergency Services also implements the Operational Area Emergency Plan. The Operational Area Emergency Plan describes a comprehensive emergency management system which provides for a planned response to disaster situations associated with natural disasters, technological incidents, terrorism, and nuclear-related incidents. It delineates concepts relating to various emergency situations, identifies components of a comprehensive emergency management system and describes the overall responsibilities for protecting life and property and assuming the overall well-being of the population. The plan contains 17 annexes detailing specific emergency operations for different emergency situations; in addition there are 7 stand-alone emergency plans (County of San Diego 2010b).

County of San Diego Code of Regulatory Ordinances Sections 68.401-68.406, Defensible Space for Fire Protection Ordinance

This ordinance addresses the accumulation of weeds, rubbish, and other materials on a private property found to create a fire hazard and be injurious to the health, safety, and general welfare of the public. The ordinance constitutes the presence of such weeds, rubbish, and other materials as a public nuisance, which must be abated in accordance with the provisions of this section. This ordinance is enforced in all County Service Areas, and in the unincorporated areas of the County outside of a fire

protection district. All fire protection districts have a combustible vegetation abatement program, and many fire protection districts have adopted and enforce the County's ordinance.

County of San Diego Code of Regulatory Ordinances Sections 96.1.005 and 96.1.202, Removal of Fire Hazards

The San Diego County Fire Authority (SDCFA), in partnership with CAL FIRE, the Bureau of Land Management, and the U.S. Forest Service, is responsible for the enforcement of defensible space inspections. Inspectors from CAL FIRE are responsible for the initial inspection of properties to ensure an adequate defensible space has been created around structures. If violations of the program requirements are noted, inspectors provide a list of required corrective measures and provide a reasonable time frame to complete the task. If the violations still exist upon reinspection, the local fire inspector will forward a complaint to the County for further enforcement action.

County of San Diego Consolidated Fire Code

The County of San Diego, in collaboration with the local fire protection districts, created the first Consolidated Fire Code in 2001. The Consolidated Fire Code contains the County and fire protection districts' amendments to the California Fire Code. The purpose of consolidation of the County and local fire districts adoptive ordinances is to promote consistency in the interpretation and enforcement of the fire code for the protection of the public health and safety, which includes permit requirements for the installation, alteration, or repair of new and existing fire protection systems, and penalties for violations of the code. The Code provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems, and vegetation management. Additionally, the fire code regulates hazardous materials and associated measures to ensure that public health and safety are protected from incidents relating to hazardous substance releases. San Diego County's 2014 Consolidated Fire Code is the most recently adopted version and it contains the County and fire protection districts' amendments to the 2013 California Fire Code.

County of San Diego General Plan

Updated (and adopted) in August 2011, the County of San Diego General Plan guides future growth in the unincorporated areas of the County and considers projected growth anticipated to occur within various communities. Policies relevant to emergencies, hazards, and hazardous materials that may occur at the Proposed Project site are listed below.

Land Use Element

- **Policy LU-6.10: Protection from Hazards**. Require that development be located and designed to protect property and residents from the risks of natural and man-induced hazards.

Safety

- **Policy S-3.1: Defensible Development.** Require development to be located, designed, and constructed to provide adequate defensibility and minimize the risk of structural loss and life safety resulting from wildland fires.
- **Policy S-3.3: Minimize Flammable Vegetation**. Site and design development to minimize the likelihood of a wildfire spreading to structures by minimizing pockets or peninsulas, or islands of flammable vegetation within a development.
- **Policy S-3.4: Service Availability**. Plan for development where fire and emergency services are available or planned.
- **Policy S-3.5: Access Roads.** Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.
- **Policy S-3.6: Fire Protection Measures**. Ensure that development located within fire threat areas implement measures that reduce the risk of structural and human loss due to wildfire.
- **Policy S-3.7: Fire Resistant Construction.** Require all new, remodeled, or rebuilt structures to meet current ignition resistance construction codes and establish and enforce reasonable and prudent standards that support retrofitting of existing structures in high fire threat areas.
- P**olicy S-4.2: Coordination to Minimize Fuel Management Impacts.** Consider comments from CAL FIRE, U.S. Forest Service, local fire districts, and wildlife agencies for recommendations regarding mitigation for impacts to habitat and species into fuel management projects.
- **Policy S-6.1: Water Supply.** Ensure that water supply systems for development are adequate to combat structural and wildland fires.
- **Policy S-6.3: Funding Fire Protection Services.** Require development to contribute its fair share towards funding the provision of appropriate fire and emergency medical services as determined necessary to adequately serve the project.
- **Policy S-6.4: Fire Protection Services for Development.** Require that development demonstrate that fire services can be provided that meet the minimum travel times identified in Table S-1 (Travel Time Standards) (20 minutes in the RL-40, 80, and 160 land use designations).
- **Policy S-6.5: Concurrency of Fire Protection Services.** Ensure that fire protection staffing, facilities and equipment required to serve development are operating prior to, or in conjunction with, the development. Allow incremental growth to occur until a new facility can be supported by development.

- **Policy S-11.1: Land Use Location**. Require that land uses involving the storage, transfer, or processing of hazardous materials be located and designed to minimize risk and comply with all applicable hazardous materials regulations.
- **Policy S-11.3: Hazards Sensitive Uses.** Require that land uses using hazardous materials be located and designed to ensure sensitive uses, such a schools, hospitals, day care centers, and residential neighborhoods, are protected. Similarly, avoid locating sensitive uses near established hazardous materials users or High Impact Industrial areas where incompatibilities would result.
- **Policy S-11.4: Contaminated Lands.** Require areas of known or suspected contamination to be assessed prior to reuse. The reuse shall be in a manner that is compatible with the nature of the contamination and subsequent remediation efforts.
- **Policy S-11.5: Development Adjacent to Agricultural Operations.** Require development adjacent to existing agricultural operations in Semi-Rural and Rural Lands to adequately buffer agricultural areas and ensure compliance with relevant safety codes where pesticides or other hazardous materials are used.
- **Policy S-15.3: Hazardous Obstructions within Airport Approach and Departure**. Restrict development of potentially hazardous obstructions or other hazards to flight located within airport approach and departure areas or known flight patterns and discourage uses that may impact airport operations or do not meet Federal or State aviation standards (County of San Diego 2011c).

Subregional Plans

The Proposed Project site is located within the Mountain Empire Subregional Plan and the Jacumba Subregional Group Area Community Plan planning area boundaries. There are no policies relevant to hazards or hazardous materials in the Mountain Empire Subregional Plan or Jacumba Subregional Group Area.

2.4.3 Analysis of Project Effects and Determination as to Significance

Because the Phase I Environmental Site Assessment identified no recognized environmental conditions or potential sources of hazardous materials or contamination on the Project properties, evaluation of the Proposed Project against the thresholds for projects with on-site contamination is not warranted.

2.4.3.1 Hazardous Materials

Guidelines for the Determination of Significance

For the purposes of this Environmental Impact Report (EIR), the County's Guidelines for Determining Significance and Report Format and Content Requirements – Hazardous Materials and Existing Contamination (Hazardous Materials Guidelines; County of San Diego 2007a) applies to both the direct impact analysis and the cumulative impact analysis. A project would generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary. Conversely, if a project does not propose any of the following, it would generally not be considered to have a significant effect related to hazardous substances and existing contamination, absent specific evidence of such an effect:

- The project is a business, operation, or facility that proposes to handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the Health and Safety Code (H&SC), generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the H&SC, and the project will not be able to comply with applicable hazardous substance regulations.
- The project is a business, operation, or facility that would handle regulated substances subject to CalARP risk management plan requirements that in the event of a release could adversely affect children's health due to the presence of a school or day care within one-quarter mile of the facility.

Analysis

During construction, operation and maintenance, and demolition of the Proposed Project, hazardous materials, such as petroleum products and maintenance chemicals, would be brought to and used on the site. Numerous federal, state, and local regulations exist that require strict adherence to specific guidelines regarding the use, transportation, and disposal of such hazardous materials. Regulations that would be required of those transporting, using or disposing of hazardous materials are discussed above and include RCRA, CERCLA, the Hazardous Materials Transportation Act, the International Fire Code, Title 22 and Title 27 of the California Code of Regulations, and the County Consolidated Fire Code. The Project site would include the use and storage of limited quantities of lubricants and cleaners potentially covered under Chapter 6.95 of the Health and Safety Code (H&SC), which would be used to maintain the on-site equipment and facilities. Storage and handling of any materials covered under Chapter 6.95 of the H&SC would be undertaken in accordance with all applicable regulations. No underground storage tanks are proposed as a part of the Project. PV panels typically contain stable components such as silicon and metal, which would not pose a hazardous materials concern. The silicon in some panels may

be infused with trace amounts of chemicals such as boron or phosphorous. However, the small amounts of these chemicals would not pose a hazard in the unlikely event of panel failure and release. The battery storage system, located within an enclosed structure, would likely be a lithium ion type that contains lithium ions in some compound such as lithium manganese oxide. Release of the lithium is unlikely due to the rigorous construction and regulations such as UL1642, lithium cell safety standards. The primary hazards associated with these types of batteries are overheating and fire, which are discussed in Section 3.1.6, Public Services, and Section 2.4.3.3, Wildfire Hazards.

The Project would include a step-up transformer that would contain approximately 6,000 gallons of mineral oil, which would necessitate the need to develop a Hazardous Materials Business Plan (HMBP) in accordance with Chapter 6.95 of the H&SC, Division 20, (AB 2185 & AB 2189). The project is designed to comply with the requirement of Chapter 6.95 of the H&SC, including containment provisions for potential spills by containing the materials within boxed components and mounting these on concrete foundations. The Project would not include any other on-site storage, use, or transport of hazardous materials as a part of normal operations in quantities equal to or greater than 55 gallons, 500 pounds, or 200 cubic feet of substances classified as hazardous materials. All storage, handling, transport, emission, and disposal of hazardous substances shall be in full compliance with federal, state, and local regulations. California Government Code Section 65850.2 requires that no final certificate of occupancy or its substantial equivalent be issued unless there is verification that the owner or authorized agent has met, or is meeting, the applicable requirements of the H&SC, Division 20, Chapter 6.95, Article 2, Sections 25500–25520. The Proposed Project would be able to comply with applicable hazardous substance regulations and impacts would, therefore, be **less than significant**.

The Proposed Project is not located within 0.25 mile of a school and would not include the use of a regulated substance subject to CalARP risk management plan requirements (19 CCR, Division 2, Chapter 4.5). The nearest school is the Jacumba Elementary School, located at 44343 Old Highway 80, approximately 3.5 miles west of the Project site. As such, the Proposed Project would not expose a school or daycare facility to regulated substances that could adversely affect children's health.

Based on the analysis provided, the Proposed Project would comply with hazardous substance regulations, would not expose persons to hazardous materials, and would not produce hazardous emissions within 0.25 mile of an existing or proposed school or day care facility. Therefore, impacts would be **less than significant**.

2.4.3.2 Airport Hazards

Guidelines for the Determination of Significance

For the purposes of this EIR, the County's *Guidelines for Determining Significance and Report Format and Content Requirements – Airport Hazards* (Airport Hazards Guidelines; County of San Diego 2007b) applies to the direct and indirect impact analysis, as well as the cumulative impact analysis.

A significant impact would result if:

- The project is located within an established AIA for a public airport or public use airport and proposes a development intensity, flight obstruction, or other land use that conflicts with the ALUCP or CLUP (if no ALUCP is adopted) and as a result, the project may result in a significant airport hazard.
- Conflicts with FAA Regulations: The proposed project is determined by the FAA to constitute a hazard to aviation based on FAA review of Form 7460-1, is inconsistent with current FAA Heliport Design Criteria for Heliports not subject to an ALUCP or CLUP, or conflicts with FAA rules or regulations related to airport hazards and as a result, the project may result in a significant airport hazard.

Analysis

As discussed above, the nearest registered airport is the Jacumba Airport located approximately one and a half miles west of the Project site. The airport is unattended and unlighted and is mainly used as a glider facility by single-engine aircraft and sailplanes, with activity predominately occurring during weekends in non-summer months. The Proposed Project is located within 1.5 miles of the Jacumba airport, and according to the Airport Land Use Compatibility Plan (~~ACLUP~~ALUCP) a portion of the property is within Airport Influence Area 2 of the AIA, on the far side of some intervening high terrain (Figure 2.4-1). Influence Area 2 is concerned with height of developments based on the "conical surface," which is the elevations at which aircraft navigate in proximity to the airport. The Proposed Project structures would be below the conical surface for the Jacumba Airport and would not represent an incompatible use. Incompatible uses are defined in the ALUCP and include those uses creating visual or electrical distractions such as bright lights or those that may look like runway lights or uses that may attract birds or other wildlife hazardous to aircraft. The gen-tie line associated with the Proposed Project is outside the AIA. Because of topographical conditions between the Jacumba Airport and the Project site, as well as the low aircraft activity and modeled flight paths, ~~and because the Proposed Project does not include incompatible uses,~~ the Project would not cause a safety hazard associated with air traffic in the area.

Notification of the FAA may not be required because of the presence of the "shielding" topography between the airport and the Project site per Part 77 Section 77.9(e)(1). The shielding topographic feature (Airport Mesa) reaches an elevation of approximately 3,600 feet above mean sea level (amsl), while the Jacumba Airport is at an elevation of approximately 2,800 feet amsl and the Project site is at an elevation between approximately 3,100 feet and 3,200 feet amsl. With the tallest possible Project feature being the gen-tie poles, which would be a maximum height of approximately 150 feet, the tallest Project components would be approximately 250 feet below the elevation of the intervening or shielding topography. The FAA made a formal determination of no hazard to air navigation on March 6, 2015.

While the FAA Solar Guide focuses on the design considerations and application of solar panels at airport sites, there is some guidance pertaining to reflectivity of solar technology that may apply. However, as previously stated in Section 2.4.2, the FAA cautions users against relying on the reflectivity section as the FAA is reviewing it based on new information and field experience (FAA 2010). It should also be noted that pursuant to the Code of Federal Regulations, Section 91.119 of the General Operating and Flight Rules, aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure except when necessary for takeoff or landing (14 CFR 91.119). The Proposed Project is not located adjacent to a landing strip and would not result in substantial glare, although brief periods of glare potential exist immediately west of the facility shortly after sunrise and immediately east of the facility shortly before sunset at specific times of the year. The solar facility would be directed southwards towards the sun and include PV technology that is designed to maximize absorption and avoid reflectivity of solar light to realize the greatest potential conversion to electricity. Please refer to Section 2.1, Aesthetics, of this EIR for a discussion of glare relative to the Proposed Project. The necessarily low glare of the facility combined with the orientation of the facility to the south, away from approaching aviation users, would ensure that the Proposed Project would not cause a significant impact to aircraft as a result of glare. Further, because of the presence of topography either side of the site (Airport Mesa and Jacumba Mountains) the window for glare would be below the conical surface and would affect aircraft pilots and the FAA is not requiring any markings or alterations and did not find any hazard associated with glare. The intervening presence of Airport Mesa also results in the Project components, including the transmission poles, being below heights that would cause safety concerns for the FAA and no lighting or marking requirements are anticipated as a result.

The Proposed Project would have **no impact** on airports or air traffic in the area.

2.4.3.3 Wildfire Hazards

Guidelines for the Determination of Significance

For the purposes of this EIR, the County's *Guidelines for Determining Significance and Report Format and Content Requirements – Wildland Fire and Fire Protection* (Wildland Fire Protection Guidelines; County of San Diego 2010c) applies to the direct and indirect impact analysis, as well as the cumulative impact analysis.

An affirmative response to, or confirmation of any one of the following guidelines, will generally be considered a significant impact related to wildland fire and fire protection as a result of the project, in the absence of evidence to the contrary:

- The project cannot demonstrate compliance with all applicable fire codes.
- A comprehensive Fire Protection Plan has been accepted, and the project is inconsistent with its recommendations.
- The project does not meet the emergency response objectives identified in the Public Facilities Element of the County General Plan or offer feasible alternatives that achieve comparable emergency response objectives [addressed in section 2.4.3.4, Hazards Associated with Emergency Responses incorporated by reference herein.]

Analysis

As stated above, the Proposed Project site is located within an area classified as Very High Fire Hazard Severity Zone by CAL FIRE (Appendix 2.4-2). Vegetation on the site and adjacent sites is dominated by chaparral species, which represent fuels that would spread wildfire on and off the site. Based on the region's fuels, fire history, and expected fire behavior, a high-intensity fire can be expected to occur in the area (Dudek 2013), which poses a potentially significant hazard to those working on the site and in the surrounding area.

An increase in the risk of wildland fire on the site would occur during construction when there is the largest amount of fuel on the site and increased activity combined with a greater number of ignition sources on the site. Similarly, an increase in the risk of wildland fire would occur during decommissioning, when there is increased activity and ignition sources on the site. Potential ignition sources during construction and related activities include chainsaws, wood chippers, grinders, torches, earthmoving equipment, and other vehicles that could create sparks, be a source of heat, or leak flammable materials, which would increase the possibility of fire. Because the details of the construction methods, approach, and responsibilities are not determined until a contractor is awarded a contract, the final construction fire prevention plan (CFPP) cannot be included as a technical study. Therefore, the Proposed Project would result

in a **potentially significant** wildfire hazards impact~~s~~ (**Impact HZ-1**) without the preparation of a Construction FPP that has been accepted by the County. The CFPP shall ~~and that~~ either require~~s~~ the Proposed Project comply with all applicable fire codes for construction or incorporate~~s~~ site-specific modifications that (a) explain why the strict compliance is impractical, (b) complies with the intent and purpose of the code, and (c) do not lessen health, life and fire safety standards. The FPP for operation of the Project does include a Conceptual CFPP, which contains the elements necessary for the CFPP to ~~assess~~ ensure the potential impact is mitigated to below a level of significance.

Further, preparation of the County-required traffic control plan and construction notification procedures would provide safe and efficient traffic flow in the area and on site during construction activities, which would also ensure safe access to the site and surrounding properties by emergency responders.

During operations and maintenance the Proposed Project and gen-tie line would introduce potential ignition sources that do not currently exist on the site. The equipment on the site that may be ignition sources during operation and maintenance includes transformers, capacitors, electric transmission lines (including the gen-tie line), substations, vehicles, and gas- or electric-powered small hand tools. Depending on the type of lithium ion battery selected for the Project, the potential hazards are primarily associated with the possibility of thermal runaway (similar to overheating) occurring from a malfunctioning or damaged battery. Newer battery technologies have minimized the occurrence of thermal runaway through a system of protections including internal cell monitoring and partitioning; use of non-flammable chemicals; container design and features; ventilation, and air-conditioning (HVAC) systems; and inert gas fire suppression systems. The site's inverters and solar panels represent potential ignition sources that have a low likelihood of causing fires. All of this equipment represents a risk of sparking or igniting nearby off-site flammable vegetation. However, ~~A~~all battery components would be on concrete, within an enclosed structure, avoiding contact with ignition sources and would not include liquids that could spill. The enclosed structure would be equipped with a fire suppression system.

Additionally, the Proposed Project represents a potential challenge to firefighters due to accessibility within the site. The site cannot typically provide code-consistent fire apparatus access for all structures, which results in some structures being farther than 150 feet from fire apparatus access roads. However, the site is accessible via smaller, lighter, and more maneuverable vehicles that are available. Because the rural area fire stations often are staffed with volunteer firefighters, there may be challenges due to lack of appropriate training for effectively and safely responding around new solar facilities. To reduce the risk of fire on the site and improve the effectiveness of an emergency response should a fire occur on site, a County-required site-specific Fire Protection Plan (FPP) for the Proposed Project (Appendix 2.4-2) would be implemented.

The FPP is consistent with the 2014 County Consolidated Fire Code and the County Building and Electrical Codes and employs all related CPUC regulations, including General Order 95: Rules for Overhead Electric Line Construction. The FPP considered the topography, geology, combustible vegetation (fuel types), climatic conditions and fire history of the Proposed Project location; as well as addressed, in terms of compliance with applicable codes and regulations including, but was not limited to: water supply, primary and secondary access, travel time to the nearest fire station, structure setback from property lines, ignition-resistant building features, fire protection systems and equipment, impacts to existing emergency services, defensible space and vegetation management. Customized measures were developed to work in conjunction with one another to reduce fire threat and heighten fire protection including: fuel modification through the site, fire access and primary access roads, participation in the San Diego Rural Fire Protection District (SDRFPD) Community Facilities District or a Fire an Emergency Response Services Agreement, annual inspections, ability to de-energize non-panel components from one location, training for local fire agencies, fire extinguishers, water tanks, system contact information, on-going maintenance, consistent identification of all Proposed Project components and the gen-tie alignment to the ECO Substation. Other mitigation and design measures, such as hot works restrictions, Red Flag Warning protocols, contractor fire suppression equipment mandates, and vegetation clearing and management, among others, would reduce significantly the probability of a wildfire during construction. The FPP clarifies requirements of the San Diego County Consolidated Fire Code. Some of the requirements are as follows; for a full list refer to Appendix 2.4-2:

1. Access
    a. Primary access road into the switch station site and around the perimeter access road inside the fence shall be 24 feet wide.
    b. Site driveways (travel ways) between the panel blocks will be 20 feet wide occurring at 600-foot intervals. No facility appliance (including inverters) will be more than 300 feet from one of these fire apparatus driveways.
    c. Turnouts (30-foot-long pullouts with appropriate taper on each end) will be provided along each site "driveway," spaced about every 400 to 600 feet. Turnouts can be eliminated with permission of the fire marshal if sufficient technical data is provided indicating that the surface adjacent to the "driveway" will support fire apparatus for the life of the Project.
    d. Service drivable areas are to remain drivable for the life of the Project. To maintain drivability, and to ensure surfaces do not become soft/powdery over time, service drivable areas will be treated with a soil binder, or similar substance.

e. Perimeter of Projects to include a perimeter fuel modification zone.

f. Provide a hammerhead or similar turnaround outside the front gate.

2. Fencing/Gates/Signs

   a. Provide pedestrian/man gates approximately every 750 feet along perimeter fences to enable firefighting operations.

   b. Provide chain with padlock for all gates except primary access gate where keypad or similar will be installed.

   c. Primary access gate – keypad acceptable, but must also provide a Fire Marshal-approved access system.

   d. Illuminated sign at primary access gate entry to include a motion sensor that activates light and/or reflective sign so headlights/flashlight will adequately illuminate. Prefer not to have sign illuminated all night.

3. Defensible Space

   a. 50 feet of fuel modification around perimeter of the site to include rock/gravel, no vegetative fuel.

   b. Fuel modification of 100 feet must be provided around the energy (battery) storage facilities.

   c. Fuel modification throughout the site (whole site will include non-irrigated, low-growing ground cover maintained at roughly 6 inches).

   d. Inverters that are not located adjacent to a fire access road will include 10 feet in all directions free of vegetation (landscape fabric with gravel over, for example).

4. Adequate Water Supply

   a. The capacity of the two water tanks at the facility will be a minimum of 10,000 gallons each.

5. Specific Gen-Tie Requirements

   a. The overhead gen-tie line will consist of non-combustible steel poles that will be accessed from existing and newly-constructed roads.

   b. The gen-tie line will consist of a 138 kV overhead alignment. The 138 kV transmission line will be constructed on steel poles designed for extreme winds that meets or exceeds current California Public Utilities Commission (CPUC) standards.

   c. The gen-tie line will have an overhead static wire to improve lightning performance.

d. Vegetation management around steel poles and overhead power lines will reduce fire danger. The vegetation within the gen-tie right-of-way will be cleared around steel poles a minimum of 48 inches up to 10 feet, and access roads will include fuel management along both edges, where not prohibited by environmental constraints.

6. Battery Storage

   a. Available Battery Management Modules (BMMs) continuously monitor the state of charge, battery health, temperature, and other important information. Also available are Mastery Battery Management Modules (MBMMs) to ensure charge uniformity throughout each string of Li-ion batteries.

   b. EPA Compliant Spill Containment and Access.

   c. IEEE 1547 compliance (to preclude unplanned power backfeed or islanding).

   d. Cells certified to stringent UL1642 Lithium cell safety standards.

   e. Effective battery standard operating procedures (SOPs) shall be developed and shall include processes that guide every aspect of battery safety, from shipping and receiving to handling, daily use, storage, and other functions involving the batteries. SOPs must be in compliance with 6.b, 6.c, and 6.c.

7. Training

   a. Training program for local fire agencies including preparation of a technical training video with SDCFA input and customized for this facility that can be easily viewed by new firefighters who rotate through the local fire stations.

Therefore, with the implementation of the Project FPP (Appendix 2.4-2), approved by the SDCFA, operation of the Proposed Project would be in compliance with applicable fire codes; impacts would be **less than significant**.

Construction and decommissioning of the Proposed Project would be in accordance with the Conceptual CFPP included in the FPP; however, a more detailed site specific CFPP would be required to ensure compliance with the applicable fire codes. Therefore, construction and ~~decomissioning~~decommissioning would result in a **potentially significant impact**.

2.4.3.4 Hazards Associated with Interference with Emergency Responses

Guidelines for the Determination of Significance

For the purposes of this EIR, the County's Wildland Fire Protection Guidelines and Airport Hazards Guidelines (County of San Diego 2010c, 2007b) apply to the direct and indirect impact analysis, as well as the cumulative impact analysis. An affirmative response to, or

confirmation of any one of the following Guidelines, will generally be considered a significant impact related to wildland fire and fire protection as a result of the Project, in the absence of evidence to the contrary:

- The project does not meet the emergency response objectives identified in the Safety Element of the County General Plan or offer feasible alternatives that achieve comparable emergency response objectives. The fire and emergency services response time established in the Safety Element of the San Diego County General Plan Table S-1 is less than 20 minutes.
- The project proposes a structure or tower 100 feet or greater in height on a peak or other location where no structures or towers of similar height already exist and as a result, the project could cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response.

Analysis

A direct increase in demand for fire protection services would occur at the Proposed Project site during construction and decommissioning when there is increased activity, there are higher amounts of fuel on the site, and there are a greater number of ignition sources on the site, including humans. Similarly, an increase in the risk of wildland fire would occur during decommissioning, when there is increased activity and additional ignition sources on the site. Potential ignition sources during construction-related activities include chain saws, wood chippers, grinders, torches, earth-moving equipment, and other vehicles that could create sparks, be a source of heat, or leak flammable materials, that would increase the possibility of fire, but the implementation of **M-HZ-1** reduces the risk to below a level of significance.

Travel times in the area are currently within the County General Plan guideline of 20 minutes for rural use areas (Dudek 2013). Assuming a National Fire Prevention Association standard travel-time speed of 35 miles per hour (mph) that considers average terrain, average traffic, weather, and slowing down for intersections, sites within approximately 11 miles could be reached within 20 minutes of the fire station. This standard travel time is appropriate for the Proposed Project site since the site does not have any characteristics that would be prohibitive for access. Fire emergencies that may occur at the site would primarily be responded to by the Jacumba Fire Station, which is located approximately 3.5 miles west of the site. Additional response would be from SDCFA's Boulevard and Campo Fire Stations, CAL FIRE's ~~Whitestar Station and~~ Campo Station, and SDRFPD's Lake Moreno Fire Station~~.~~, as well as from mutual aid resources from throughout the County and state, when necessary. The ~~previously planned construction of the~~ completed new fire station in Boulevard is expected to provide improved fire response services to the region, rather than additional services. The co-location of the Boulevard Fire Department station, apparatus and staff and the CAL FIRE White Star resources results in a more

streamlined, cost efficient operation for fire and emergency medical response in the area. The location of the station is within the General Plan travel time standard for the project, and the resources anticipated at the new co-located station will be at least equivalent to the existing, in terms of apparatus. It is expected that staffing capabilities will be complimented by the closer day to day training and interactions resulting from the co-location of career and reserve firefighters. Construction of the Proposed Project would result in a temporary increase in fire protection service demand in the area. Response time from the Jacumba Fire Station is calculated at less than 9 minutes, which complies with the General Plan response time threshold of 20 minutes for rural areas. The Proposed Project would not adversely affect response times and therefore, the Proposed Project would not result in the need for increased fire protection facilities or services in the area during construction.

Additionally, as described in Chapter 1, Project Description, of this EIR, and discussed in Section 3.1.7, Traffic and Transportation, a traffic control plan and notification procedures would be implemented to ensure safe and efficient traffic flow in the area during construction activities. The traffic control plan would be prepared in consultation with the County and would contain Project-specific measures for noticing, signage, policy guidelines, and the limitation of lane closures to off-peak hours (although it is noted that no requirement for roadway or lane closures has been identified).

The Proposed Project would use newer solar technology with no flammable heating oil, and therefore is expected to generate even fewer emergency fire calls. As stated above, travel times in the area are currently within the County General Plan guideline of 20 minutes for rural use areas, and the emergency response time to the Proposed Project site is 9-minutes from the Jacumba Fire Station. Based on the documented rate of 0.83 emergency calls per year from older technology solar facilities, it can be concluded that, once operational, the Proposed Project would conservatively generate less than one emergency response call annually. The addition of one emergency call annually would not be expected to substantially impact local fire department response times or availability.

An indirect increase in demand for fire protection services could occur where a project causes an increase in population, which could then result in increases in fire emergency service calls. In this case, relatively few of the up to approximately 200 total construction workers employed are expected to relocate to the area during construction. Of the employees required during construction, none are expected to temporarily relocate to the area with their families. Therefore, the temporary increase in workers during construction is not expected to cause a substantial increase in fire emergency service calls, such that an increase in fire protection services would be needed. During operations of the Proposed Project, there would be no employees on site, thus no increased fire protection services or facilities would be needed.

Emergency medical response is supplemented by fire protection response services because the first responders to emergency medical responses are sometimes fire response units. Emergency medical response incidents increase with increases in population. The local population would temporarily increase by an average of 120 workers daily and a maximum of approximately 140 workers on any one day at peak of construction. The additional workers could require emergency medical response services. ~~AMR San Diego (AMR) is the contracted emergency medical service provider for this area (AMR San Diego 2012). AMR's closest location within the Project area is at 1390 Dewey Place in Campo. Due to AMR's very large service area, when an AMR unit responds to a call it can be unavailable for additional calls for extended periods of at least 30 minutes and up to a few hours or more. Although fire departments respond to emergency medical calls whether AMR is available or not, they do not always have adequate equipment to respond to certain medical emergencies, particularly when there is no paramedic on the engine. Should two or more emergencies necessitating paramedic response occur within the same time frame in the Project area during the construction and decommissioning phases, response times would be impacted. A regionally applicable Emergency Services Capabilities Assessment was prepared for a nearby project in Boulevard. The analysis found that the current emergency medical response capabilities in the Proposed Project area may not be adequate to meet the applicable 20-minute response time when emergencies occur simultaneously (Dudek 2013)~~Mercy Medical Transportation, Inc. (Mercy) replaced AMR San Diego (AMR) in 2015 as the contracted provider of emergency medical response services in the eastern portion of San Diego County. Mercy ~~would~~has stations two 24-hour –day a week 7 advanced life service (ALS) ambulances in Alpine, double the number under AMR, allowing for one unit to move out to Campo to cover a call. Another ALS ambulance is stationed in the recently completed new Boulevard station. In addition, an ALS ambulance is stationed at the ~~Cal Fire~~CAL FIRE San Diego Rural ALS station in Jamul, as well as two ALS ambulances at the ~~Cal Fire~~CAL FIRE/County Fire station in Otay Mesa, which previously ~~only has~~had one ambulance. In providing additional resources that include additional ambulance coverage of the area, adequate emergency response times would be maintained in the event that two or more calls are received during construction and decommissioning phases. Therefore, the Proposed Project would not directly result in a significant environmental impact ~~but would incrementally contribute to an existing **potentially significant impact** to emergency medical response **(Impact HZ-2)**~~[1], and impacts would be less than significant. ~~The Proposed Project includes mitigation measure **M-HZ-2**, which will ensure that the Project contributes funds to the local fire and emergency response capabilities to equip fire stations with the proper paramedic equipment and staff including engines with a paramedic during construction and decommissioning phases.~~

[1] The County recognizes that the effects to response time has been found by courts to be a social issue not a physical change resulting in an environmental impact; however the evaluation contained herein provides adequate analysis suitable for addressing the Project impact on response times regardless of whether one considers it a social impact or an environmental impact. Addressing the social impact can be a consideration for consistency with the County's General Plan policies on new development (Policy S-6.3).

Once construction is complete, operation and maintenance activities would be limited to the Project site and access on the site would be maintained pursuant to the FPP measures as previously described. The population at the site would be so low and infrequent at the site that project operation would not significantly contribute to response times for emergency medical services. Therefore, the Proposed Project would not result in significant risks related to interference with emergency response times established by the County, and impacts would be **less than significant.**

Structures or towers that are placed along ridgelines where no structures or towers of similar height already exist could present safety concerns for emergency response aircraft and could increase the risks associated with aviation activities for emergency response. The gen-tie alignment would be overhead consisting of approximately three steel poles with a height of up to 150 feet. These structures would not be located on a ridgeline and would be close to the existing ECO Substation and other poles and towers with similar heights. Therefore project towers potentially exceeding 100 feet in height would be adjacent to existing towers of similar heights associated with the ECO Substation and ESJ Gen-tie projects. In addition, as result of the presence of intervening topography (Airport Mesa), the conical surface associated with the runway approach and take off patterns is elevated above components proposed as part of the project would not cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response. The location of the gen-tie towers that could exceed 100 feet in height is not on a peak and would be adjacent to existing transmission towers serving the ECO Substation. Therefore, the Proposed Project does not include any structures over 100 feet or greater in height on a peak or other location where no structures or towers of similar height already exist and as a result, the project would not cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response. Therefore, the Proposed Project would have a **less than significant impact** associated with project towers potential to impede emergency response aircraft. As indicated above, the Proposed Project would not conflict with FAA rules or regulations, nor would it constitute a hazard based on review of the FAA Part 77.9. Form 7460-1 has been submitted for formal FAA review. In response to the submittal of Form 7460, a Determination of No Hazard to Air Navigation dated March 6, 2015, was received from the FAA.

2.4.4 Cumulative Impact Analysis

The cumulative study area for hazards and hazardous materials would primarily focus on the immediate vicinity of the Proposed Project site. Similar to other potential impacts, such as those related to geology and soils, risks related to hazards and hazardous materials are typically localized in nature since they tend to be related to on-site existing hazardous conditions and/or hazards caused by the Proposed Project's construction or operation.

2.4.4.1 Hazardous Materials

As stated in Section 2.4.3.1, the Phase I Environmental Site Assessment found no existing hazardous materials, REC's, or evidence of soil contamination on the site. Other cumulative projects, including each of those listed in Table 1-7, Cumulative Scenario – Reasonably Foreseeable Approved and Pending Projects (Chapter 1), would similarly be required to survey for potential areas of hazardous contamination, and if such areas were found, would be required to remediate any contaminated areas. Therefore, the Proposed Project would not have a cumulatively considerable contribution to any potential cumulative impact related to hazardous sites contamination.

Additionally, as stated previously, during construction, operation and maintenance, and demolition of the Proposed Project, hazardous materials, such as petroleum products and maintenance chemicals, would be brought to and used on the sites. Numerous federal, state, and local regulations exist that require strict adherence to specific guidelines regarding the use, transportation, and disposal of such hazardous materials. Compliance with applicable laws and regulations would reduce the risk of an accidental release of a hazardous material, and the use of hazardous materials on the solar facility site for their intended purpose is not expected to pose a hazard to the public or environment. The cumulative projects listed in Table 1-7 (Chapter 1) would also be subject to all applicable laws and regulations governing the use, storage, and disposal of hazardous materials. Other renewable energy projects in the area, such as the Energia Sierra Juarez, ECO Substation, and Rugged Solar, all pose similar risks associated with handling, use, transportation, storage, and disposal of hazardous materials as the Proposed Project. The Project, as with all other cumulative projects, would comply with applicable laws and regulations intended to minimize the risk and threat to public health from the accidental release of hazardous materials. Additionally, the Star Ranch residential project and Rough Acres Foundation Campground are located at a great enough distance away from the Project such that accidental release of hazardous materials would not likely result in adverse effects due to compliance with all applicable laws. With adherence to all applicable laws, the risk of an accidental release of a hazardous material from the Proposed Project and cumulative projects would not pose a hazard to the public or environment, and **impacts would not be cumulatively considerable**.

The Proposed Project site is not located within 0.25 mile of a school and would not include the use of a regulated substance subject to CalARP risk management plan requirements (per 19 CCR Division 2, Chapter 4.5). Therefore, the Proposed Project **would not contribute to a cumulatively considerable impact** relative to emissions of regulated substances subject to CalARP risk management plan requirements.

2.4.4.2 Airport Hazards

Cumulative project would be required to ensure that airport and aircraft safety is provided, with FAA notifications as necessary and where potential hazards are identified projects modified or required to include markings and/or lighting adornments. As discussed in Section 2.4.3.2, the Proposed Project would not result in any safety hazard impact associated with air traffic in the area and therefore would not contribute to any cumulative impacts associated with airport hazards.

2.4.4.3 Wildfire Hazards

The cumulative study area for wildfire hazards is the Jacumba area, which is in the extreme southeastern corner of San Diego County and encompasses the majority of the projects listed in Table 1-7. Nearby communities include Boulevard, Manzanita, and Jacumba, and are all considered communities at risk of wildfire (California Fire Alliance 2010; CALFIRE 2001). Terrain varies throughout the vicinity, with elevations ranging from below 1,700 feet amsl to nearly 4,700 feet amsl. Vegetation varies, but large portions are dominated by sparse, semi-arid vegetation including desert scrub, chaparral, juniper woodland, and oak woodland. Land ownership within the area includes the State of California, the Bureau of Land Management, the County, Tribal Lands, and private holdings. Population density is a sparse 34 people per square mile.

As discussed previously, the Proposed Project would temporarily increase the risk of wildland fires during construction and decommissioning activities. It is possible that construction schedules would overlap for the Proposed Project; in particular, the Soitec Solar Rugged project is anticipated to overlap with the Proposed Project during certain construction phases. As required in the Final EIR for the Soitec Solar projects, the Rugged project will implement a CFPP similar to that of the Proposed Project (County of San Diego 2014) (as described in **M-HZ-1**), as well as other mitigation and design measures such as hot works restrictions, Red Flag Warning protocols, contractor fire suppression equipment mandates, and vegetation clearing and management, among others, that have been analyzed and determined to reduce the probability of a wildfire during construction to a level less than significant. With implementation of **M-HZ-1** (requiring a CFPP) and preparation of the County-required traffic control plan, the Proposed Project, when combined with short-term potential overlap with other cumulative projects, **would not contribute to a significant cumulative impact** associated with wildland fires during construction.

Once construction is complete the Proposed Project would introduce potential ignition sources that do not currently exist on the site. The equipment on the site that may be ignition sources during operation and maintenance includes: transformers, capacitors, electric transmission lines, substations, vehicles, and gas or electric powered small hand tools. The inverters, batteries, and

solar panels represent potential ignition sources that are considered to have low likelihood of causing fires. All of this equipment represents a risk of sparking or igniting nearby fuels, particularly with off-site flammable vegetation and during high wind conditions. To reduce the risk of fire on the site and improve the effectiveness of an emergency response should a fire occur on site, a site-specific FPP would be implemented. The FPP would ensure that the Proposed Project would implement a number of design measures to ensure compliance with the San Diego County Consolidated Fire Code. Cumulative projects would undergo similar review for adequate fire protection and would be required to implement design measures or mitigation measures, as necessary. Such projects include Rugged Solar project; Tule Wind project; ECO Substation project; and Energia Sierra Juarez U.S. Transmission Line project, each of which would implement a project-specific FPP. In addition, these cumulative projects include mitigation that requires funding to assist the San Diego Rural Fire Protection District and SDCFA in improving the response and firefighting effectiveness near the project sites. The Project will participate in the SDRFPD's Community Facilities District or a Fire and Emergency Services Agreement, paying fair-share funding toward fire services in order to comply with General Plan policies for new development. Funding provided by the Project results in capital that can be used toward firefighting and emergency response improvements so that the SDRFPD/SDCFA and area firefighting agencies will be able to perform their mission into the future at levels consistent with the General Plan. In addition, the Project will provide annual funding to the SDCFA for fire prevention and other related services in the region. The implementation of the FPPs reduce the proportionate share of fire impacts on a cumulative level and the payment of fair share fees would ensure consistency with General Plan policies. Therefore, the Proposed Project, in combination with cumulative projects, would be in compliance with applicable fire codes and would not result in a cumulatively considerable **impact** associated with wildland fires during construction and operation.

2.4.4.4 Hazards Associated with Interference with Emergency Responses

Cumulative projects in the nearby area would have the potential to impair existing emergency and evacuation plans during construction, including the ECO Substation, Energia Sierra Juarez, and Tule Wind projects. This could occur from any of the following: (1) an increase in population that is induced from cumulative projects which are unaccounted for in emergency plans; (2) an increase in population that emergency response teams are unable to service adequately in the event of a disaster; or (3) evacuation route impairment if multiple development projects concurrently block multiple evacuation or access roads, such as during construction, resulting in impaired emergency response times.

As discussed previously, emergency medical response is supplemented by fire protection response services because the first responders to emergency medical responses are sometimes fire response units. Emergency medical response incidents increase with increases in population.

With a significant increase in the local population, even temporarily, due to the Proposed Project and cumulative projects, an associated increase in the need for emergency medical response capabilities could occur. Existing response times in the area are approximately 9 minutes. During construction of the Proposed Project emergency response times would not be inhibited such that they would exceed the established County response time of 20 minutes. ~~However, a regionally applicable Emergency Services Capabilities Assessment prepared for a nearby project indicated that, due to the limited ambulance service in the Proposed Project area (only one ambulance located in Campo that serves the Project area), if more than one medical emergency were to occur simultaneously, the ambulance response time for the second (or any emergency after the first) would not meet the County standard for rural areas (20-minute response time when emergencies occur simultaneously) (Dudek 2013). If~~ With the introduction of additional resources resulting from the change in provider to Mercy, even when overlap of the construction schedule occurs with other cumulative projects, emergency response capabilities ~~may b~~would not ~~e~~ be ~~further~~ degraded ~~creating a potentially~~such that a cumulative~~ly considerable~~ impact would occur. ~~However, per **M-HZ-2**, the Proposed Project would contribute funds toward local fire response capabilities to equip fire stations with paramedic equipment and engines with a paramedic. Therefore, with implementation of **M-HZ-2**, service coverage in the Project area would be improved, and the Proposed Project would mitigate the cumulatively considerable impact to below a level of significance. Additionally, cumulative projects would contribute funding toward fire and emergency services as required to improve emergency response times in the region~~. Each of the cumulative projects would be required to comply with the emergency response objectives identified in the Safety Element of the County General Plan. Therefore, the Proposed Project in combination with cumulative projects **would not result in a significant cumulative impact** to emergency responses[2] ~~with the implementation of **M-HZ-2**~~.

2.4.5 EMF-Related Public Concerns or Hazards

Recognizing there is a great deal of public interest and concern regarding potential health effects and hazards from exposure to EMFs and associated harmonic components, the following discussion provides information regarding EMFs and associated harmonic components as they relate to public health and safety. This discussion does not consider EMFs in the context of CEQA for determination of environmental impact because no general agreement has been reached among scientists that EMFs create a health risk and because there are no defined or adopted CEQA standards for defining health risks from EMFs. As a result, the EMF information is provided below for the benefit of the public and decision makers.

[2] The County recognizes that the effects to response time has been found by courts to be a social issue not a physical change resulting in an environmental impact; however the evaluation contained herein provides adequate analysis suitable for addressing the Project impact on response times regardless of whether one considers it a social impact or an environmental impact. Addressing the social impact can be a consideration for consistency with the County's General Plan policies on new development (Policy S-6.3).

Solar facilities create varying amounts of EMFs and related harmonic components from the associated power facilities and transmission lines. EMF attenuates rapidly with distance from the source. Given the proximity to sensitive receptors and setbacks that are required, the Proposed Project is not anticipated to result in measurable levels of EMF at residences, the closest being approximately 3,500 feet to the north. There is inadequate evidence of health effects at low exposure levels. The CPUC implemented a number of EMF measurement, research, and education programs, and provided the direction that led to the preparation of the California Department of Health Services comprehensive review of existing studies related to EMFs from power lines and associated potential health risks. The CPUC stated, "at this time we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences. As stated in the rulemaking initiating this proceeding, at this time we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences" (CPUC 2006). Thus, the CPUC has not established any connection between EMF exposure and negative effects to human health. Furthermore, the California Department of Public Health, Environmental Health Investigations Branch, ceased its inquiry into EMF in the mid-2000s (California EMF Program 2006).

Stray voltage could occur if electrical equipment is not maintained properly. Induced current or stray voltage has the potential for adverse health effects if not properly grounded. As part of the regular operations and maintenance measures of the Project, electrical equipment would be examined to confirm that they are properly grounded and that there are no stray voltage issues through the life of the Proposed Project. Therefore, no health effects would be anticipated to occur from stray voltage.

Typical measures to reduce EMF include increasing the distance between cables and people, shielding and undergrounding of cables, or increasing the height of overhead cables. Because this Project is a considerable distance from the nearest people, the most effective EMF reduction measure is inherent in the location and design of the facility.

2.4.6 Significance of Impacts Prior to Mitigation

Hazardous Materials

The Proposed Project would comply with hazardous substance regulations, would not expose persons to hazardous materials, and would not produce hazardous emissions within 0.25 mile of an existing or proposed school or daycare facility. As such, the Project would not handle or store hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the H&SC, would be in compliance with applicable hazardous substance regulations and would not generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in

underground storage tanks regulated under Chapter 6.7 of the H&SC. The Project would not be a business, operation, or facility located within 0.25 mile of a school or daycare facility. Therefore, impacts would be **less than significant**.

Airport Hazards

The Proposed Project is not located near a public airport or public use airport and would not cause glare impacts for aircraft. The Project is located within an established AIA for the Jacumba public airport, but does not propose a development intensity, flight obstruction, or other land use that conflicts with the ALUCP. Therefore, the Proposed Project would have a **less than significant impact** on airports or air traffic in the area.

Wildfire Hazards

During construction and decommissioning activities there would be increased human activity and ignition sources, including equipment that could create sparks, be a source of heat or leak flammable materials, on the Project site. The Project has provided a comprehensive FPP that demonstrates compliance with all applicable fire codes. However, the construction and decommissioning of the Proposed Project would require development of a CFPP. Therefore, the Proposed Project would result in a **potentially significant impact** regarding wildfire hazards (**Impact HZ-1**).

Hazards Associated with Interference with Emergency Responses

~~The Proposed Project would contribute funds toward local fire and emergency response capabilities (M-HZ-2).~~ The 150-foot gen-tie pole structures would not be located on a ridgeline and would be close to the existing ECO Substation and numerous poles and towers of similar height. Further, the Proposed Project would not conflict with FAA rules or regulations, nor would it constitute a hazard based on review of the FAA Part 77.9. The Project does not propose a structure or tower 100 feet or greater in height on a peak or other location where no structures or towers of similar height already exist; as a result, the Project would not cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response. Therefore, the Proposed Project would not result in significant risks associated with aviation activities for emergency response, and impacts would be less than significant. The Project ~~does not meet~~site is serviced by Mercy, which now meets the emergency response objectives identified in the Safety Element of the County General Plan or offer feasible alternatives that achieve comparable emergency response objectives. Therefore, the Proposed Project would result in a ~~**potentially**~~ **less than significant impact** regarding emergency responses ~~(**Impact HZ-2**)~~.

2.4.7 Mitigation Measures

As discussed in Section 2.4.3.3, **M-HZ-1** would be implemented to reduce the risk of fire hazards during construction and operation:

M-HZ-1 The Proposed Project Applicant would prepare a construction fire prevention plan (CFPP), and have the CFPP reviewed and approved by the San Diego County Fire Authority and the California Department of Forestry and Fire Protection a minimum of 45 days prior to issuance of the first construction permit, such as a grading permit. The Applicant shall provide evidence that Cal Fire approved the CFPP, prior to issuance of a building permit. The CFPP will identify potential sources of ignition and fuel during construction. The CFPP shall also contain the elements described in the conceptual CFPP found in Appendix 2.4.4, and will detail the specific fire-prevention measures that will be employed during construction and decommissioning. ~~The CFPP will identify potential sources of ignition and fuel during construction, the San Diego County Fire Authority SDCFA and the California Department of Forestry and Fire Protection shall not approve any CFPP unless it contains the elements described in the conceptual CFPP found in Appendix 2.4.4, and will detail the specific fire-prevention measures that will be employed during construction.~~

~~Mitigation measure **M-HZ-2** would be implemented in order to reduce the impacts to emergency medical response:~~

M-HZ-2 ~~To ensure that the Proposed Project would not impact emergency medical response capabilities in the area, prior~~Prior to the issuance of a ~~building~~ grading permit, the Applicant shall demonstrate it has either participated in the San Diego Rural Fire Protection District Community Facilities District or entered into a Fire and Emergency Services Agreement or similar development agreement, through which a fair-share contribution toward local emergency response ~~capabilities~~ services will be paid. ~~At a minimum the fair share amount will be sufficient to fund emergency medical services(paramedic staff position and startup kit, or equivalent) during construction and decommissioning phases to assure response times of 20 minutes or less.~~

M-HZ-2 is not technically a mitigation measure because there are no potentially significant impacts associated with emergency response times. However, in accordance with the County's requirements for a Fire and Emergency Services Agreement and for the purposes of tracking the Applicant has committed to M-HZ-2 and the County has identified it as a condition of approval.

2.4.7.1 Conclusion

This section provides a synopsis of the conclusion reached in each of the impact analyses, and the level of impact that would occur after mitigation measures are implemented.

Hazardous Materials

Due to compliance with all applicable laws and regulations, the Proposed Project would result in **less than significant** impacts related to hazardous materials contamination, including the routine transport, use, and disposal of hazardous substances.

Airport Hazards

The Proposed Project would result in **less than significant impacts** to an airport land use plan, because it does not propose incompatible uses within 2 miles of a public airport or public use airport, or within the vicinity of an active private airstrip that would result in a safety hazard for people residing or working in the Proposed Project area.

Wildfire Hazards

As stated in Section 2.4.6, wildfire hazards would result in a potentially significant impact (**Impact HZ-1**) during construction and ~~decomissioning~~decommissioning activities due to increased activity and ignition sources on the site. With preparation of a CFPP as required by **M-HZ-1**, impacts would be **less than significant with mitigation incorporated** because San Diego County Fire Authority SDCFA and the California Department of Forestry and Fire Protection can only approve the CFPP if it contains the elements described in the conceptual CFPP provided in the FPP attached hereto. San Diego County Fire Authority SDCFA and the California Department of Forestry and Fire Protection experts have found that CFPPS with these regional elements are adequate to reduce the risk of ignition sources starting a fire to a below a level of significance based on experiences with recent projects, such as Ocotillo Wind, the guidance set out in the County's Report Format And Content Requirements for Wildland Fire and Fire Protection Plans (County of San Diego 2010), and the County's Consolidated Fire Code (County of San Diego 2011) that has been certified as equal to or more stringent than the state minimum fire protection standards in 14 CCR 1270 et seq.

Further, with preparation of the County-required traffic control plan and construction notification procedures, impacts to access for emergency responders during a wildfire hazard would be **less than significant**.

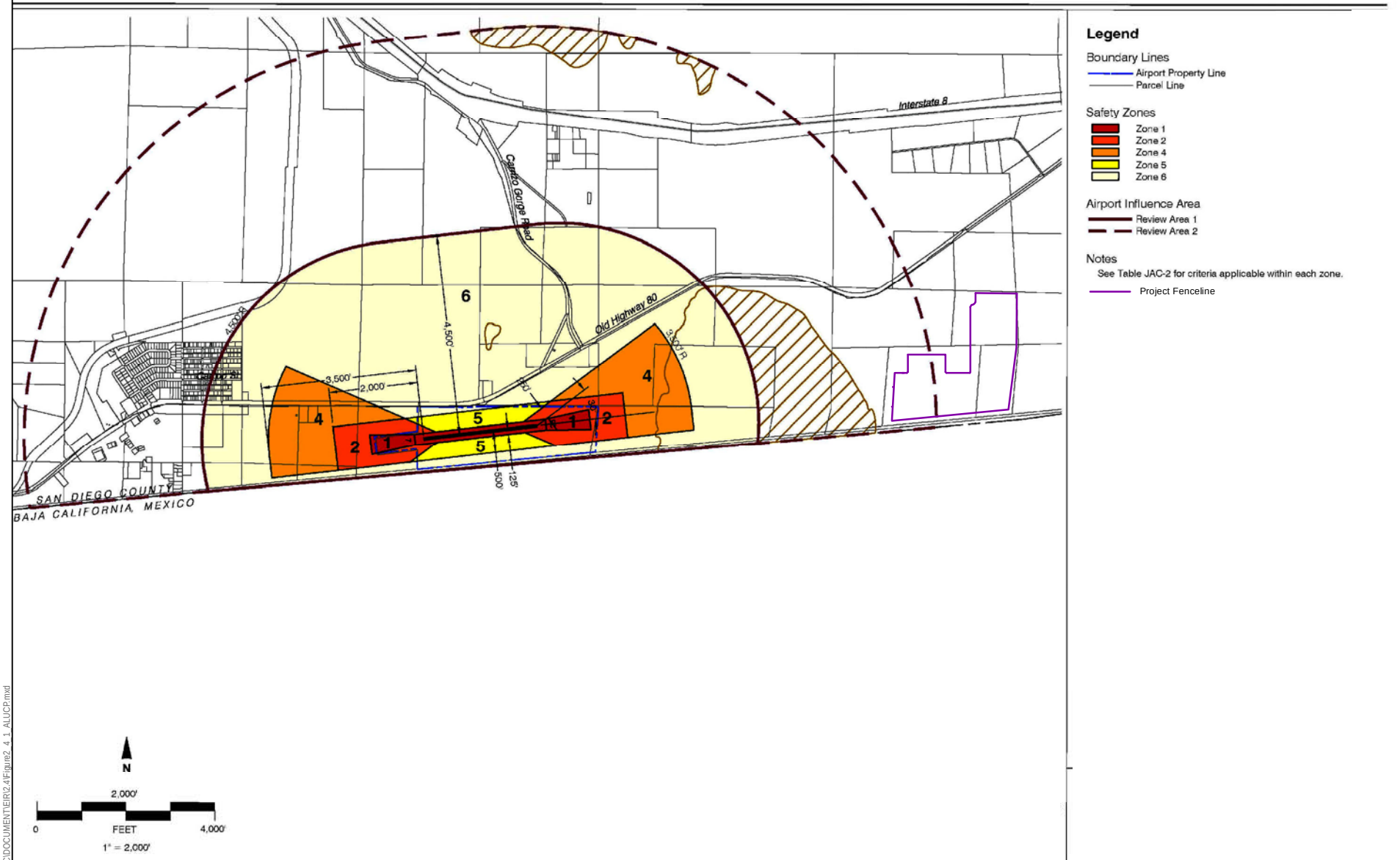
In addition, a Project FPP for operations, has been approved by the SDCFA that is consistent with the 2014 County Consolidated Fire Code and the County Building and Electrical Codes and

employs all related CPUC regulations, including General Order 95: Rules for Overhead Electric Line Construction; therefore, the Proposed Project would be in compliance with applicable fire codes and impacts would be **less than significant**.

Hazards Associated with Interference with Emergency Responses

~~With implementation of mitigation measure **M-HZ-2**~~ The Proposed Project would not exceed emergency response objectives identified in the Safety Element of the County General Plan. Further, the Proposed Project would not result in significant risks associated with aviation activities for emergency response as proposed towers are adjacent to existing towers of similar height. Impacts would therefore be less than significant.

INTENTIONALLY LEFT BLANK



DUDEK

8477

SOURCE: County of San Diego 2011

FIGURE 2.4-1

Project Location in Jacumba Airport Influence Area

Jacumba Solar Energy Project

Path: Z:\Projects\8477\MAPDOC\DOCUMENTIEIR\2.4\Figure2_4-1_ALUCP.mxd

INTENTIONALLY LEFT BLANK