
1.0 INTRODUCTION

This Environmental Impact Report (EIR) has been prepared to meet the requirements of the California Environmental Quality Act (CEQA) for purposes of evaluating the potential environmental impacts, mitigation measures, and alternatives associated with the proposed Ferrell Solar Farm (FSF), Rockwood Solar Farm (RSF), Iris Solar Farm (ISF) and Lyons Solar Farm (LSF), collectively known as the “Iris Cluster Solar Farm Project.” This EIR describes the existing environment that would be affected by, and the environmental consequences which could result from the construction and operation of the proposed projects as described in detail in Chapter 3.0 of this EIR.

1.1 OVERVIEW OF THE PROPOSED PROJECTS

The proposed solar farm projects would consist of two primary components: (1) the combined construction and operation of an expansive photovoltaic (PV) or concentrated photovoltaic (CPV) solar energy facility and supporting uses; and (2) the construction and operation of off-site electrical transmission infrastructure and associated interconnections. The primary components within the solar farms will be solar arrays, electrical substation facilities, and other operations and maintenance (O&M) facilities. In addition, a major component of the projects would be restoration of the project sites to agricultural use in up to 40 years.

Four separate Conditional Use Permit (CUP) applications have been filed by the project applicant for each of the four projects. Additionally, Variance Applications have been filed with the County for these projects in order to exceed the currently allowed height limit for transmission towers within the applicable zones.

The combined acreage of the project solar farm project sites (not including the potential off-site transmission routes) encompasses 1,422 acres of land located in the southern portion of Imperial County. The interconnection for the proposed projects will occur at the 230 kilovolt (kV) side of the San Diego Gas & Electric (SDG&E) Imperial Valley (IV) Substation, located approximately 5 miles northwest of the project sites. This connection will occur via the existing Mount Signal Solar Farm substation and its shared 230 kV electrical transmission line. Power from the proposed projects may first be collected at one or more shared on-site substations via overhead and/or underground collector line(s).

Transmission and collector lines would extend along private lands, traversing land on the perimeter of the four proposed project sites, or where extending off-site, on the perimeters of previously approved solar project sites such as the Mount Signal and Calexico Solar Farms Project site. These off-site locations have been previously reviewed pursuant to CEQA and have been approved by the County. The transmission and collector lines would extend both west to east and north to south adjacent to major roads (e.g., Kubler Road, State Route [SR] 98, George Road, Corda Road, and Ferrell Road) and other local roadways. Figure 3.0-3 in Section 3.0, Project Description, provides an index of the major project components. The details of each of the four solar projects, including potential off-site transmission alignments, is further described and depicted in Section 3.0.

1.1.1 Agency Roles and Responsibilities

1.1.1.1 County of Imperial

The County of Imperial will be required to approve each of the four CUPs and corresponding Variance applications for each of the projects to authorize the construction and operation of the proposed solar facilities and supporting infrastructure, including transmission lines. Pursuant to Imperial County Land Use Ordinance Title 9, Division 5, Chapter 9, “Solar Energy Plants” are uses permitted in the A-2, A-2-R, and A-3 Zones, subject to issuance of a CUP by the County. Transmission lines, including “supporting towers, poles, microwave towers, utility substations” are permitted uses within the A-3 Zone. In addition, approval of the projects would involve County approval of a Variance for each project to allow the proposed transmission towers to exceed the 120-foot height limit currently established in the A-2, A-2-R

and A-3 zones in which the projects are located. No land use changes would be required in order to implement the proposed action.

The following approvals will be required for implementation of the projects:

1. **Approval of CUPs.** Implementation of the solar farm projects would require the approval of four CUPs by the County to allow for the construction and operation of the proposed FSF, RSF, ISF, and LSF projects. The projects are located on a total of 10 privately-owned legal parcels zoned A-2 (General Agriculture), A-2-R (General Agriculture Rural), and A-3 (Heavy Agriculture). Pursuant to Title 9, Division 5, Chapter 9, "Solar Energy Plants" is a use that is permitted in the A-2, A-2-R, and A-3 Zones, subject to approval of a CUP. ("Transmission lines, including supporting towers, poles, microwave towers, utility substations" are permitted uses within the A-3 Zone.)
2. **Site Plans.** Site Plan and Architectural Review is required.
3. **Variance.** Variances are required for the solar energy facility sites in order to exceed the height limit for transmission towers within the A-2, A-2-R, and A-3 Zones. The existing A-2, A-2-R, and A-3 Zones allow a maximum height limit of 120 feet; whereas, transmission towers of up to 140 feet in height are proposed.
4. **Certification of the EIR.** After the required public review for the Draft EIR, the County will respond to written comments, edit the document, and produce a Final EIR to be certified by the Planning Commission and/or Board of Supervisors prior to making a decision on the projects.
5. **Restoration Plans.** The project applicant has prepared a site restoration plan for each of the four projects (EIR Appendix L). As required by the County, when the projects are decommissioned at the end of their life spans, the project applicant or its successor in interest would be responsible for implementing the restoration plan, which includes the removal, recycling, and/or disposal of all solar arrays, inverters, transformers and other structures on each of the sites, as well as restoration of the site to its pre-project condition with respect to agricultural suitability (e.g., soils, infrastructure). The County is responsible for approving the restoration plan for each project and confirming that financial assurances for each of the projects are in conformance with Imperial County ordinances.
6. **Williamson Act Contract Cancellation.** There are three active Williamson Act Contracts within the FSF and ISF project sites. Agricultural Preserve 160 includes the two parcels associated with Contract 2003-02 (Assessor's Parcel Numbers [APNs]: 059-050-003 and 059-120-001); and one parcel associated with Contract 2004-01 (APN: 059-050-002) within the ISF project site. One parcel associated with Contract 2003-001 (APN: 059-050-001) is also part of Agricultural Preserve 160 and is located within the FSF project site. Petitions for cancellation of these contracts were filed with the County in 2014.

Subsequent ministerial approvals may include, but are not limited to:

- Grading and clearing permits;
- Building permits;
- Septic system permits;
- Occupancy permits; and
- Encroachment permits.

1.1.1.2 Other Agency Reviews and/or Consultations

1.1.1.2.1 Federal

U.S. Army Corps of Engineers

- Consultation, if required, for a disturbance to jurisdictional waters of the U.S. that may trigger the need for a Clean Water Act (CWA) Section 404 permit. Note, no U.S. Army Corps of Engineers (USACE) jurisdictional features are identified on-site or proposed to be impacted by the project.

U.S. Fish and Wildlife Service

- Consultation regarding potential impacts to special-status species or their habitat as required under the Federal Endangered Species Act (FESA). If applicable, Section 10 take permits would be required for the loss of such species and their habitat.

1.1.1.2.2 State

California Department of Fish and Wildlife (Trustee Agency)

- Consultation regarding potential impacts to California special-status species or their habitats as required under the California Endangered Species Act (CESA). If applicable, incidental take permits for the loss of such species or their habitat would be required. Consultation regarding potential impacts to waters/wetlands of the state. If applicable, a Section 1602 Streambed Alteration Agreement would be required. Note, no California Department of Fish and Wildlife (CDFW) jurisdictional features are identified on-site or proposed to be impacted by the project.

California Department of Transportation

- Utility encroachment permits and/or consultation on potential impacts/improvements regarding Caltrans roads/rights-of-way.

California Regional Water Quality Control Board

National Pollution Discharge Elimination System (NPDES) Construction General Permit Order No. 2009-009-DWQ. Requires the applicant to file a public Notice of Intent to discharge stormwater and to prepare and implement a stormwater pollution prevention plan (SWPPP).

NPDES General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems Order No. 2013-0001-DWQ. Requires that discharges of pollutants from areas of new development be reduced to the maximum extent practicable in order to protect receiving waters and uphold water quality standards.

Consultation Regarding Potential Impacts to Jurisdictional Waters. If applicable, CWA Section 401 Water Quality Certification, or permitting under California Porter-Cologne Act.

1.1.1.2.3 Local

Imperial County Fire Department

- Review as part of the EIR process including the final design of the proposed fire system.

Imperial Irrigation District

- Review as part of the EIR process including approval of encroachment permits.

Imperial County Air Pollution Control District

- Review as part of the EIR process regarding consistency with the Imperial County Air Pollution Control District (ICAPCD) CEQA Air Quality Handbook, the 1991 Air Quality Attainment Plan, and the State Implementation Plan for particulate matter less than 10 microns in diameter (PM₁₀) in the Imperial Valley, and including verification of Rule 801 compliance.

1.2 RELATIONSHIP TO STATUTES, REGULATIONS, AND OTHER PLANS

County of Imperial General Plan and Land Use Ordinance

The General Plan provides guidance on future growth in the County of Imperial. Any development in the County of Imperial must be consistent with the General Plan and the Land Use Ordinance (Title 9, Division 10).

Renewables Portfolio Standard Program

Established in 2002 under Senate Bill (SB) 1078, California's Renewables Portfolio Standard (RPS) was accelerated in 2006 under SB 107 by requiring that 20 percent of electricity retail sales be served by renewable energy resources by 2010. Subsequent recommendations in California energy policy reports advocated a goal of 33 percent by 2020. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08 requiring that "...[a]ll retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020." The following year, Executive Order S-21-09 directed the California Air Resources Board, under its Assembly Bill 32 authority, to enact regulations to achieve the goal of 33 percent renewables by 2020.

In the ongoing effort to codify the ambitious 33 percent by 2020 goal, Senate Bill X1-2 was signed by Governor Brown, in April 2011. This new RPS preempts the California Air Resources Boards' 33 percent Renewable Electricity Standard and applies to all electricity retailers in the state including publicly owned utilities (POUs), investor-owned utilities (IOUs), electricity service providers, and community choice aggregators. All of these entities must have adopted the new RPS goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and the 33 percent requirement being met by the end of 2020. Renewable energy sources include wind, geothermal, and solar.

California Global Warming Solutions Act of 2006, Assembly Bill 32 (Statutes 2006; Chapter 488; Health and Safety Code Sections 38500 et seq.)

This Act requires the Air Resources Board (ARB) to enact standards that will reduce greenhouse gas (GHG) emissions to 1990 levels by 2020. Electricity production facilities are regulated by the ARB.

Title 17 CCR, Subchapter 10, Article 2, Sections 95100 et seq.

These ARB regulations implement mandatory GHG emissions reporting as part of the California Global Warming Solutions Act of 2006.

Federal Clean Air Act

The legal authority for federal programs regarding air pollution control is based on the 1990 Clean Air Act Amendments (CAAA). These are the latest in a series of amendments made to the Clean Air Act (CAA). This legislation modified and extended federal legal authority provided by the earlier Clean Air Acts of 1963 and 1970.

The Air Pollution Control Act of 1955 was the first Federal legislation involving air pollution. This Act provided funds for federal research in air pollution. The CAA of 1963 was the first Federal legislation regarding air pollution *control*. It established a federal program within the U.S. Public Health Service and authorized research into techniques for monitoring and controlling air pollution. In 1967, the Air Quality Act was enacted in order to expand Federal government activities. In accordance with this law, enforcement proceedings were initiated in areas subject to interstate air pollution transport. As part of these proceedings, the Federal government for the first time conducted extensive ambient monitoring studies and stationary source inspections.

The Air Quality Act of 1967 also authorized expanded studies of air pollutant emission inventories, ambient monitoring techniques, and control techniques.

Imperial County Air Pollution Control District

The Imperial County Air Pollution Control District enforces rules and regulations regarding air emissions associated with various activities, including construction and farming, and operational activities associated with various land uses, in order to protect the public health.

Federal Clean Water Act (33 United States Code §§1251-1387)

The Federal Water Pollution Control Act (33 United States Code [USC] §§1251-1387), otherwise known as the CWA, is a comprehensive statute aimed at restoring and maintaining the chemical, physical and biological integrity of the nation's waters. Enacted originally in 1948, the Act was amended numerous times until it was reorganized and expanded in 1972. It continues to be amended almost every year. Primary authority for the implementation and enforcement of the CWA rests with the U.S. Environmental Protection Agency (EPA). In addition to the measures authorized before 1972, the Act authorizes water quality programs, requires federal effluent limitations and state water quality standards, requires permits for the discharge of pollutants into navigable waters, provides enforcement mechanisms, and authorizes funding for wastewater treatment works construction grants and state revolving loan programs, as well as funding to states and tribes for their water quality programs. Provisions have also been added to address water quality problems in specific regions and specific waterways.

Important for wildlife protection purposes are the provisions requiring permits to dispose of dredged and fill materials into navigable waters. Permits are issued by the U.S. Army Corps of Engineers (USACE) under guidelines developed by EPA pursuant to Section 404 of the CWA.

Federal Clean Water Act and California Porter-Cologne Water Quality Control Act

The project is located within the Colorado River Basin (CRB) Regional Water Quality Control Board (RWQCB), Region 7. The Federal CWA and the California Porter-Cologne Water Quality Control Act require that Water Quality Control Plans (more commonly referred to as Basin Plans) be prepared for the nine state-designated hydrologic basins in California. The Basin Plan serves to guide and coordinate the management of water quality within the region.

Federal Endangered Species Act

FESA (16 U.S.C. 1531-1544) provides protection for plants and animals whose populations are dwindling to levels that are no longer sustainable in the wild. The Act sets out a process for listing species, which

allows for petition from any party to list a plant or animal. Depending on the species, either the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) will determine whether listing the species is warranted. If it is warranted, the species will be listed as either threatened or endangered. The difference between the two categories is one of degree, with endangered species receiving more protections under the statute.

Section 9 of the ESA prohibits the "take" of listed fish and wildlife species, but not plant species. This provision applies to every person. The definition of "take" includes, by regulation, "significant habitat modification or degradation that actually kills or injures wildlife." 50 Code of Federal Regulations (CFR) §17.3.

National Historic Preservation Act

Federal regulations (36 CFR Part 800.2) define historic properties as "any prehistoric or historic district, site, building, structure, or object included, or eligible for inclusion in, in the National Register of Historic Places (NRHP)." The term "cultural resource" is used to denote a historic or prehistoric district, site, building, structure, or object, regardless of whether it is eligible for the NRHP.

California Endangered Species Act (Government Code Section 2050)

CESA is enacted through Government Code Section 2050. Section 2080 of the California Fish and Game Code prohibits "take" of any species that the commission determines to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

CESA allows for take incidental to otherwise lawful development projects. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project caused losses of listed species populations and their essential habitats.

California Lake and Streambed Program (Fish and Game Code Section 1602)

The California Department of Fish and Wildlife (CDFW) is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the Fish and Game Code (Section 1602) requires an entity to notify CDFW of any proposed activity that may substantially modify a river, stream, or lake.

1.3 PURPOSE OF AN EIR

The purpose of an EIR is to analyze the potential environmental impacts associated with a project. CEQA (Section 15002) states that the purpose of CEQA is to: (1) inform the public and governmental decision makers of the potential, significant environmental impacts of a project; (2) identify the ways that environmental damage can be avoided or significantly reduced; (3) prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and (4) disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

1.4 EIR PROCESS

1.4.1 Availability of Reports

This EIR and documents incorporated by reference are available for public review at the County of Imperial Planning and Development Services Department, 801 Main Street, El Centro, California 92243.

Copies are also available for review at the City of El Centro Public Library, 539 State Street, El Centro, CA. Documents at these locations may be reviewed during regular business hours.

Patricia Valenzuela, Planner IV
County of Imperial, Planning and Development Services Department
801 Main Street
El Centro, CA 92243

Comments received during the public review period of the Draft EIR will be reviewed and responded to in the Final EIR. The Final EIR will then be reviewed by the Imperial County Planning Commission and Board of Supervisors as a part of the procedure to adopt the EIR. Additional information on this process may be obtained by contacting the County of Imperial Planning and Development Services Department at (760) 482-4236.

Incorporation by Reference

Pursuant to CEQA Guidelines Section 15150, this EIR incorporates by reference the Mount Signal and Calexico Solar Farm Projects Final EIR (State Clearinghouse [SCH] #2011071066) and the Imperial Solar Energy Center South Project Final EIR (SCH# 2010061038). Noise measurement data derived for the Imperial Solar Energy Center South project was used for the noise impact analysis for the proposed Iris Cluster Solar Energy Project. The environmental effects of a portion of the proposed shared transmission facilities were previously evaluated in the Mount Signal and Calexico Solar Farm Project Final EIR. The provisions of incorporation by reference are set forth in the CEQA Guidelines Sections 15150(a) through (f), which state that an EIR may incorporate by reference all or portions of another document which is a matter of public record and is generally available to the public. Where an EIR uses incorporation by reference, the incorporated part of the referenced document shall be briefly summarized where possible or briefly described if the data or information cannot be summarized. Also, the relationship between the incorporated part of the referenced document and the EIR shall be described. Incorporation by reference is also described in more detail in Section 4.0, Introduction to Environmental Analysis of this EIR.

The Mount Signal and Calexico Solar Farm Projects Final EIR and the Imperial Solar Energy Center South Project Final EIR are available at the County of Imperial Planning and Development Services Department, 801 Main Street, El Centro, California 92243.

1.4.2 Public Participation Opportunities/Comments and Coordination

1.4.2.1 Notice of Preparation

The County of Imperial issued a Notice of Preparation (NOP) for the preparation of an EIR for the Iris Cluster Solar Farm Project on April 22, 2014. The NOP was distributed to City, County, State, and Federal agencies, other public agencies, and various interested private organizations and individuals in order to define the scope of the EIR. The NOP was also published in the Imperial Valley press on April 23, 2014. The NOP was subsequently republished in the newspaper to correct the date of the scoping meeting (May 15, 2014). The purpose of the NOP was to identify public agency and public concerns regarding the potential impacts of the projects, and the scope and content of environmental issues to be addressed in the EIR. Correspondence in response to the NOP was received from the following entities and persons:

- Native American Heritage Commission (April 28, 2014)
- Imperial Valley Air Pollution Control District (April 30, 2014)
- Carolyn Allen (May 15, 2014)
- Imperial Irrigation District (May 15, 2014)
- Kay Pricola email (May 22, 2014)

- Backcountry Against Dumps, Donna Tisdale, and Carolyn Allen via the Law Offices of Stephan C. Volker (May 23, 2014)
- Imperial County Department of Public Works (May 27, 2014)
- Michael Abatti (May 27, 2014)
- Imperial County Air Pollution Control District (April 30, 2014)
- Edie Harmon (May 15, 2014)

The comments submitted on the NOP during the public review and comment period are included as Appendix A to this EIR.

1.4.2.2 Scoping Meeting and Environmental Evaluation Committee

During the NOP public review period, the Iris Solar Farms Project was discussed as an informational item at the County's Environmental Evaluation Committee meeting on May 15, 2014. Additionally, a scoping meeting for the general public as well public agencies was held on May 15, 2014 at 6:00 p.m. The meeting was held by the Imperial County Planning & Developmental Services Department in the Board of Supervisors Chambers located at the County Administration Center at 940 Main Street, El Centro, CA.

1.4.3 Environmental Topics Addressed

Based on the analysis presented in the NOP and the information provided in the comments to the NOP, the following environmental topics are analyzed in this EIR.

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Noise and Vibration
- Public Services
- Transportation/Traffic
- Utilities/Service Systems

1.4.3.1 Eliminated from Further Review in Notice of Preparation

The Initial Study and NOP completed by the County (Appendix A) determined that environmental effects to Mineral Resources, Recreation, and Population/Housing would not be potentially significant. Therefore, these impacts are not addressed in this EIR; however, the rationale for eliminating these issues is briefly discussed below:

Mineral Resources

The project sites and off-site transmission areas are not used for mineral resource production and the applicant is not proposing any form of mineral extraction. According to the Conservation and Open Space Element of the County of Imperial General Plan, no known mineral resources occur within the project area nor do any of the project sites, including off-site transmission areas contain mapped mineral resources. As such, the proposed projects would not adversely affect the availability of any known mineral resources.

Recreation

Combined, the four projects would be staffed with up to 24 full-time employees, which would not significantly increase the use or accelerate the deterioration of regional parks or other recreational facilities. The temporary increase of population during construction that might be caused by an influx of workers would be minimal and not cause a detectable increase in or impact on the use of parks. Additionally, the projects do not include or require the expansion of recreational facilities.

Population/Housing

The project sites, including areas proposed for off-site transmission, have been used for and are currently being used for agricultural production. Development of housing is not proposed as part of the projects. The combined projects will be staffed with up to 24 full-time employees to maintain the facility seven days a week during normal daylight hours. The facilities will operate seven days per week, generating electricity during normal daylight hours when the solar energy is available. To ensure optimal PV (or CPV) output, the solar panels will be maintained 24 hours a day/seven days a week. The proposed projects would not result in a substantial population growth, as the number of employees required to operate and maintain the facilities is minimal. A total of four residences are located within the project sites. These residences would not be relocated as part of the proposed project; therefore, no impact associated with displacement would result.

1.4.4 Areas of Controversy to be Resolved

Areas of Concern

Section 15123(b)(2) of the *CEQA Guidelines* requires that an EIR identify areas of controversy known to the Lead Agency, including issues raised by other agencies and the public. A primary issue associated with these solar farm projects, and other solar facility projects that are proposed in the County, is the conversion of agricultural lands, including Williamson Act Contracted lands, to the solar farm use and the corresponding land use compatibility and fiscal/economic impacts to the County. Through the course of the environmental review process for these projects, other areas of concern and issues to be resolved include potential impacts related to aesthetics, biological resources, aircraft hazards, and water supply.

1.4.5 Document Organization

The structure of the Draft EIR is identified below. The Draft EIR was organized into eleven chapters, including the Executive Summary. Within Chapter 4.0 the environmental impacts associated with implementation of the proposed projects are addressed.

- The **Executive Summary** provides a summary of the proposed projects, including a summary of project impacts, mitigation measures, and project alternatives.
- **Chapter 1.0 Introduction** provides a brief introduction of the proposed projects; relationship to statutes, regulations and other plans; the purpose of an EIR; public participation opportunities; availability of reports; and, comments received on the NOP.
- **Chapter 2.0 Environmental Setting** provides a description of the physical characteristics of the proposed project study areas.
- **Chapter 3.0 Project Description** provides a description of the Iris Cluster Solar Farm Project. This chapter also defines the goals and objectives of the proposed projects, provides details regarding the individual components that together comprise the projects, and identifies the discretionary approvals required for implementation of each of the projects.
- **Chapter 4.0 Environmental Analysis** provides an analysis of the environmental impacts of the projects for the following environmental issues: aesthetics; agricultural resources; air quality;

biological resources; cultural resources; geology and soils; greenhouse gas emissions; hazards and hazardous materials; hydrology/water quality; land use and planning; noise and vibration; public services; transportation/traffic; and utilities/service systems. This chapter also identifies mitigation measures to address potential impacts to the environmental issues identified above.

- **Chapter 5.0 Analysis of Long-Term Effects** provides an analysis of growth inducing impacts, significant irreversible environmental changes, and unavoidable adverse impacts.
- **Chapter 6.0 Cumulative Impacts** discusses the impact of the proposed projects in conjunction with other planned and future development in the surrounding areas.
- **Chapter 7.0 Effects Found Not to be Significant** lists all the issues determined to not be significant as a result of the preparation of this EIR.
- **Chapter 8.0 Alternatives** analyzes the alternatives to the proposed projects.
- **Chapter 9.0 References** lists the data references utilized in preparation of the EIR.
- **Chapter 10.0 EIR Preparers and Organizations Contacted** lists all the individuals and companies involved in the preparation of the EIR, as well as the individuals and agencies consulted and cited in the EIR.