

CHAPTER 3.0

INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

3.0 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS AND ASSUMPTIONS USED

The following is an introduction to the environmental impacts analysis and general assumptions used in the project specific and cumulative analyses. Individual sections of the Draft Environmental Impact Report (Draft EIR) include assumptions, methodology and standards of significance relevant to each applicable environmental factor identified through preparation of the Initial Study (The Initial Study is included on the attached CD of Technical Appendices as **Appendix A** of this EIR).

3.1 ANALYSIS ASSUMPTIONS GENERALLY USED TO EVALUATE THE IMPACTS OF THE PROJECT

3.1.1 BASELINE ENVIRONMENTAL CONDITIONS ASSUMED IN THE DRAFT EIR

Section 15125(a) of the CEQA Guidelines requires that an EIR include a description of the physical environmental conditions in the vicinity of the project as they exist at the time the Notice of Preparation (NOP) is published. The CEQA Guidelines also specify that the description of the physical environmental conditions is to serve as the baseline physical conditions by which a lead agency determines whether impacts of a project are considered significant.

The environmental setting conditions of the project site and the surrounding area are described in detail in sections 4.1 through 4.12 of this Draft EIR. In general, these setting discussions describe the setting conditions of the project site and the surrounding area as they existed at the time the NOP for the project was released in November 2011 (SCH No. 2011111049) (see subsection 3.2, "Approach to the Cumulative Impact Analysis" subsection below).

3.1.2 GENERAL PLAN CONSISTENCY ANALYSIS

As required by CEQA Guidelines 15125(d), each relevant environmental factor analyzed in sections 4.1 through 4.12 has been evaluated for consistency with policies contained in the Imperial County General Plan (January 18, 1993, with updates and amendments through November 2008). The general plan consistency analysis is presented in tabular form. Applicable policies appear in the left column; the middle column identifies whether the project is consistent (yes or no) with the policy; and the right column includes an analysis of the consistency or inconsistency.

3.1.3 PROJECT CONSTRUCTION EFFECTS

The proposed project is a solar generation facility. In order for the project to be approved by the Imperial County Board of Supervisors, the project must be consistent with the General Plan and Land Use Ordinance Policies and Standards. During construction, impacts such as dust, equipment noise, and increased traffic volumes are anticipated to occur. Construction phase impacts would be reduced to a level which is less than significant through the implementation of mitigation measures for the following environmental factors: aesthetics, transportation and circulation, air quality; geology and soils; cultural resources; noise; agricultural resources; hazards and hazardous materials; hydrology and water quality; and biological resources. Project construction impacts specific to each environmental factor are evaluated in sections 4.1 through 4.12 (refer to subsections 4.1.3, 4.2.3, 4.3.3, etc., "Impacts and Mitigation Measures).

3.1.4 PROJECT BUILDOUT ASSUMPTIONS

For the environmental analysis, it is assumed that buildout of the solar generation facility would occur at one time with no phasing. Construction would occur over a 12 to 24 month period. Project operational impacts, such as traffic, air quality, noise, hydrology and water quality, are evaluated

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in sections 4.1 through 4.12 of the EIR (refer to subsections 4.1.3, 4.2.3, 4.3.3, etc., “Impacts and Mitigation Measures”). Buildout of the project is assumed to occur in the context of other cumulative projects which are currently approved, proposed or reasonably foreseeable.

3.2 APPROACH TO THE CUMULATIVE IMPACT ANALYSIS

3.2.1 DEFINITION OF CUMULATIVE SETTING

CEQA Guidelines Section 15130 requires that EIRs include an analysis of the cumulative impacts of a project to determine if the project’s effect is considered cumulatively considerable. As defined by CEQA Guidelines Section 15065(a)(3), “‘Cumulatively considerable’ means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

Section 15130(b)(1) goes on to identify two approaches for performing a cumulative analysis: Either 1) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or 2) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.

For the purposes of this cumulative analysis, a list approach is used. According to Section 15130(b)(2), when using a list it is important to consider the nature of each environmental resource being examined, the location of the project and its type. In keeping with these provisions, the cumulative project list was compiled in consultation with the County with input from the BLM. The projects identified were chosen because they are approved, proposed or reasonably foreseeable; located in the vicinity of the proposed project (southern Imperial County), or include solar energy facilities (project of similar size and scale).

Table 3.0-1 lists the cumulative projects. Figure 3.0-1 provides a graphical representation of each project’s location.

**TABLE 3.0-1
APPROVED, PROPOSED AND REASONABLY FORESEEABLE LARGE-SCALE PROJECTS
IN THE VICINITY OF THE CAMPO VERDE SOLAR PROJECT**

Project Number	Name of Project	Use	Project Description	Status
1+	“S” Line Upgrade 230-kV Transmission Line Project	Power Line	A power line project of approximately 18 miles extending from approximately 10 miles southwest of the City of El Centro near Liebert Road and Wixom Road along I-8 and SR-86	Ongoing upgrade of transmission line. Estimated completion by December, 2015.
2+	Imperial Valley Solar Project (Formerly SES Solar Two)	Electric Generating Facility	An electric generating facility capable of producing approximately 750 megawatts of electricity on approximately 6,500 acres generally located west of Dunaway Road and	Final EIR public review period July 27, 2010 through August 23, 2010. Currently on hold pending technology

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Project Number	Name of Project	Use	Project Description	Status
			north of I-8	change.
3+	Sunrise 500-kV Line IV West Solar Farm Interconnection to Imperial Valley Substation	Power Line	A power line project extending from Imperial Valley to Penasquitos in the City of San Diego	Currently under construction. Estimated completion by December 31, 2012.
4	SDG&E Photovoltaic Solar Field	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 14 megawatts of electricity on approximately 100 acres located adjacent to the SDG&E Imperial Valley Substation	Construction to begin after a Notice to Proceed is issued, if authorized. Construction not expected to begin until 2013.
5*	SDG&E Geotechnical Investigation	Exploratory Analysis	An exploratory analysis to determine the quality and compaction of the soil around the SDG&E Imperial Valley substation	Borehole testing in September, 2011.
6+	North Gila to Imperial Valley #2	Power Line Project	A power line project of approximately 75 miles extending from the SDG&E Imperial Valley substation to Yuma County, Arizona.	Construction not anticipated to begin until 2014.
7+	Dixieland Connection to Imperial Irrigation District Transmission System	Power Line Project	A power line project connecting the Imperial Irrigation District's "S" line from the Imperial Irrigation District substation to the Imperial Valley substation.	Construction anticipated to begin in 2012 and be completed by mid-2013.
8+	Solar Reserve Imperial Valley	Solar Power Tower	A 100 megawatt solar power tower generally located approximately 35 miles east of the Imperial Valley substation.	Construction to begin after a Notice to Proceed is issued, if authorized. Construction not expected to begin until 2014.

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Project Number	Name of Project	Use	Project Description	Status
9	Linda Vista Tentative Subdivision Map	Mixed-Use Project	A mixed use project of 182 single family homes and a 6 acre commercial lot generally located on the west side of Clark Road between I-8 and McCabe Road.	Notice of Determination filed January 23, 2006.
10	County Center II Expansion	Mixed-Use Project	A mixed use project of a commercial center, expansion of the Imperial County Office of Education, a Joint-Use Teacher Training and Conference Center, Judicial Center, County Park, Jail expansion, County Administrative Complex, Public Works Administration, and a County Administrative Complex located on the southwest corner of McCabe Road and Clark Road	Draft EIR public review period July 21, 2010 through September 16, 2010.
11+	Imperial Solar Energy Center West	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 250 megawatts of electricity on approximately 1,130 acres generally located east of Dunaway Road and located both north and south of I-8.	Notice of Determination Files November 8, 2011.
12+	Imperial Solar Energy Center South	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 200 megawatts of electricity on approximately 950 acres generally located south of SR-98 and east of Drew Road.	Joint Draft EIR/EA Under construction.
13+	Mount Signal Solar Farm ++	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 200 megawatts of electricity on approximately	Draft EIR available for public review November 3, 2011 through December

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Project Number	Name of Project	Use	Project Description	Status
			1,375 acres generally located south of SR-98 between Pulliam Road and Ferrell Road.	19, 2011.
14+	Centinela Solar Energy	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 275 megawatts of electricity generally located in the vicinity of SR-98 and Drew Road.	Notice of Determination filed December 30, 2011.
15	Mayflower Solar Farm Project	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 50 megawatts of electricity on approximately 482 acres generally located 5.5 miles southeast of the town of Calipatria.	Notice of Preparation Filed December 5, 2011.
16	Arkansas Solar Farm	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 50 megawatts of electricity on approximately 481 acres generally located 2.5 miles east of the town of Calipatria.	Notice of Preparation Filed December 5, 2011.
17	Sonora Solar Farm	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 50 megawatts of electricity on approximately 488 acres generally located 4.5 miles northeast of the town of Calipatria.	Notice of Preparation Filed December 5, 2011.
18	Alhambra Solar Farm	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 50 megawatts of electricity on approximately 482 acres generally located 3.5 miles south of the town of Calipatria.	Notice of Preparation Filed December 5, 2011.
19	Acorn Greenworks	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing	CUP Application submitted June,

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Project Number	Name of Project	Use	Project Description	Status
			approximately 150 megawatts of electricity on approximately 693 acres generally located 10 miles southwest of the City of El Centro.	2011. No longer moving forward as of April, 2012.
20+	Calexico I-A++	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 100 megawatts of electricity on approximately 666 acres generally located 6 miles west of the City of Calexico.	Draft EIR available for public review November 3, 2011 through December 19, 2011.
21+	Calexico I-B++	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 100 megawatts of electricity on approximately 666 acres generally located 6 miles west of the City of Calexico.	Draft EIR available for public review November 3, 2011 through December 19, 2011.
22+	Calexico II-A++	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 100 megawatts of electricity on approximately 733 acres generally located 6 miles west of the City of Calexico.	Draft EIR available for public review November 3, 2011 through December 19, 2011.
23+	Calexico II-B++	Photovoltaic Solar Facility	A photovoltaic solar facility capable of producing approximately 100 megawatts of electricity on approximately 732 acres generally located 6 miles west of the City of Calexico.	Draft EIR available for public review November 3, 2011 through December 19, 2011.
24	Silverleaf Solar	Photovoltaic Solar Facility	A photovoltaic solar facility and 230-kilovolt gen-tie connecting to the Imperial Valley Substation. The project would be capable of producing approximately 160	CUP Application submitted September 6, 2011.

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Project Number	Name of Project	Use	Project Description	Status
			megawatts of electricity on approximately 1,096 acres generally located south of Interstate-8 near the intersection of Westside Road and West Diehl Road.	

Source: County of Imperial, 2012; BLM, 2011.

+ Denotes projects with published environmental documents that were used in preparing the cumulative analysis.

++ These projects were analyzed in a single EIR.

*This project was not added to the traffic aggregate because it has since been completed. It is included in the table to match list agreed upon by the County.

While Imperial County as a whole has many more solar projects (refer to **Figure 3.0-2**), only projects in the vicinity of the proposed project were included based on their proximity (approximately a 15 mile radius). Several projects outside the control of Imperial County (i.e. those with BLM as the Lead Agency) were also included based on their similarity (solar projects, electrical transmission projects).

3.2.2 CONSIDERATION OF CUMULATIVE IMPACTS

While the cumulative project’s list establishes approved, proposed or reasonably foreseeable projects to consider in combination with the proposed project, the cumulative setting varies for each environmental factor. The cumulative setting is established specific to each environmental factor based on the nature and extent of the resource or issue. Some environmental factors such as hazards and hazardous materials may be highly localized. In contrast, environmental factors such as air quality and seismicity may be regional in nature. Still, some environmental factors demonstrate both aspects as in the case of geology and soils (site specific soils but more regional geology). In most cases, a geographic scope (in miles from the project site, or as determined based on a natural our jurisdictional boundary) is identified.

When considering cumulative impacts, the analysis examines whether the overall long-term impacts of all such projects would be cumulatively significant and whether the projects would cause a “cumulatively considerable” (and thus significant) incremental contribution to any such cumulatively significant impacts (CEQA Guidelines Sections 15064(h),15065(c), 15130(a), 15130(b), and 15355(b)). To fulfill these two levels of analysis, the project is assessed with regard to its incremental contribution to anticipated cumulative impacts within a geographic scope that extends beyond the project site. The geographic scope is determined for each individual issue area. The next level of analysis determines if the project’s incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e., “cumulatively considerable”).

CEQA Guidelines Section 15355 defines a cumulative impact as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” A cumulative impact occurs from “the change in the environment which results from the incremental impact of the projects when added to other closely related past, present, and reasonably

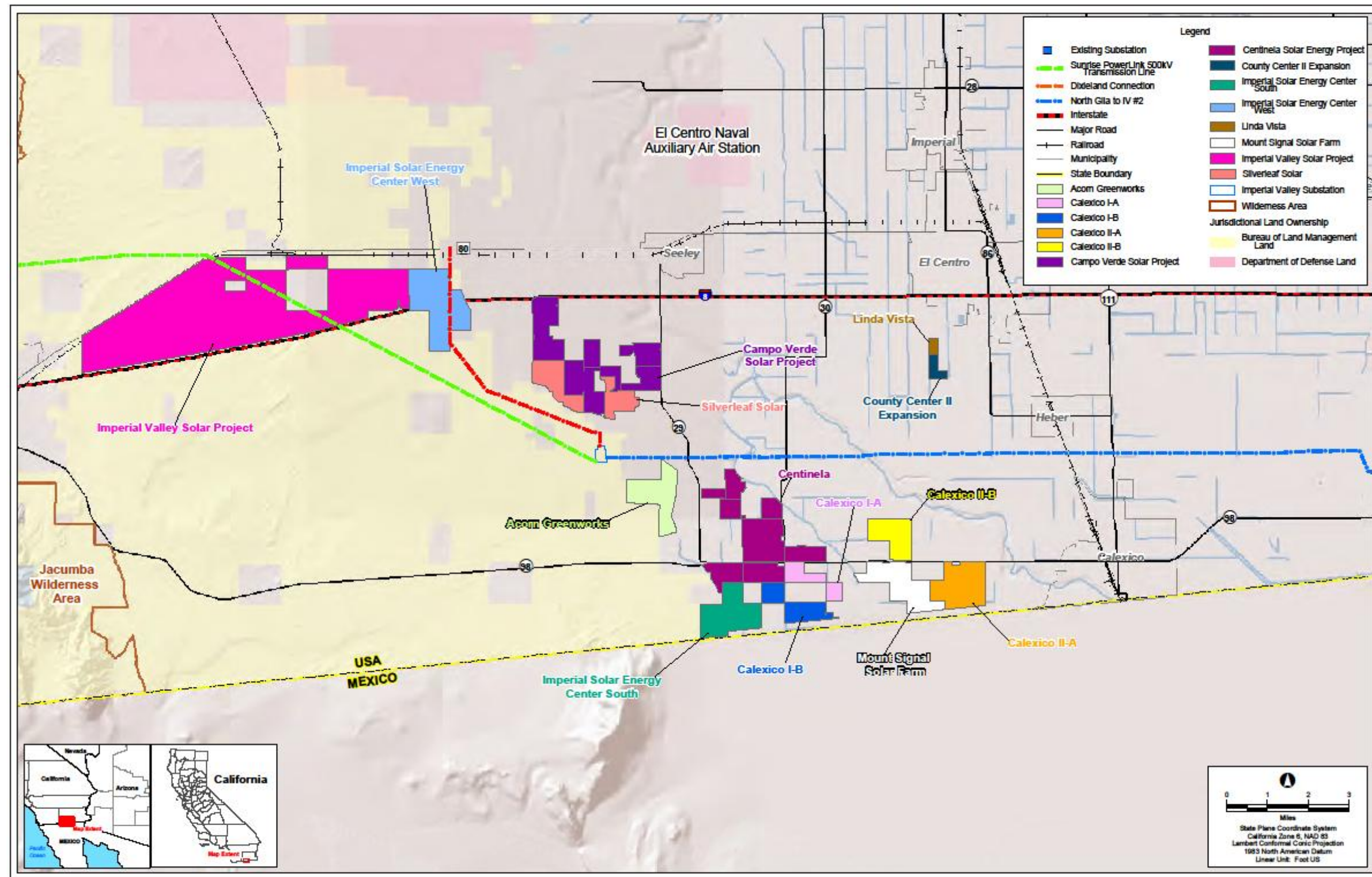
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foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time” (CEQA Guidelines Section 15355[b]).

This EIR evaluates the cumulative impacts of the project for each environmental factor with respect to geographic scope, in combination with past and present (existing) and reasonably foreseeable future projects in the area, and incremental contribution to the cumulative effects.

Chapter 5.0, Cumulative Impacts Summary, provides a summary of the cumulative impacts identified in sections 4.1 through 4.12 (refer to subsections 4.1.4, 4.2.4, 4.3.4, etc., “Cumulative Setting, Impacts and Mitigation Measures”).

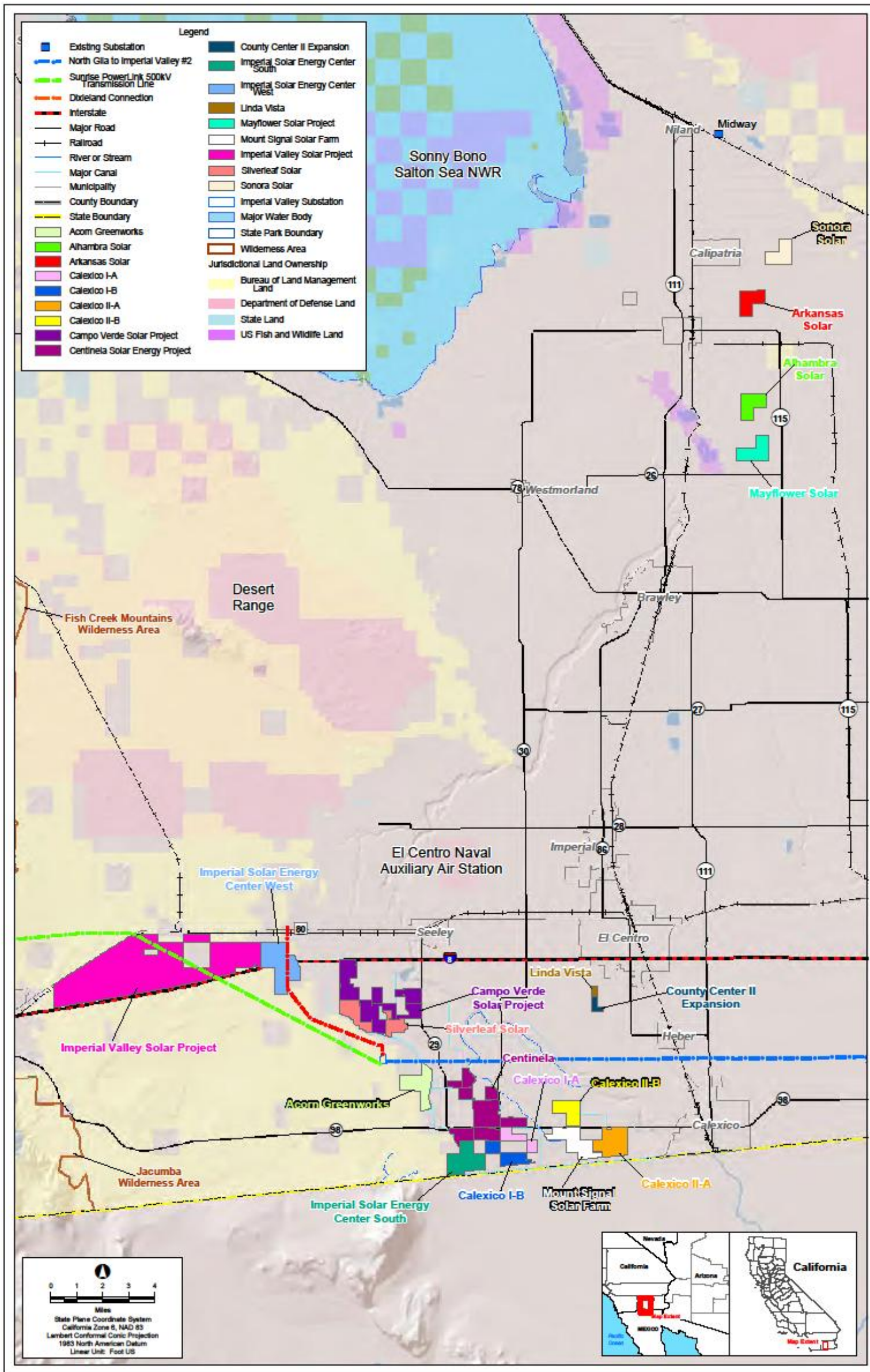
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Source: kp environmental, 2012.

FIGURE 3.0-1
CUMULATIVE PROJECTS MAP – PROJECT VICINITY

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Source: kp environmental, 2012.

FIGURE 3.0-2
CUMULATIVE PROJECTS – IMPERIAL VALLEY