

5.1 Environmental Introduction

The various parts of Section 5.0 present the evaluation of the Palen Solar Power Project's (PSPP or Project) environmental impacts in terms of 17 different environmental resource areas. Each resource area section also discusses the potential cumulative impacts of the Project and the combined effects of the Project when considered together with other projects in the same area.

Section 5.1.1 shows the list of environmental resource areas and the order in which the individual resource area discussions are presented. Section 5.1.2 establishes the overall cumulative scenario within which the Project is expected to occur and identifies the specific projects that will be considered in the cumulative impact analysis discussion provided for each environmental resource area. Only those projects that have the potential to cause impacts to the specific resource are included as appropriate in the individual sections.

Summary

This section defines projects that should be considered when evaluating possible cumulative effects of the Project. The section notes that 65 solar applications covering approximately 577,000 acres have been submitted to the Bureau of Land Management (BLM), with all but one application occurring in the California Desert District (CDD). Another four solar thermal project applications covering approximately 4,600 acres are proposed on non-BLM lands throughout the State, under California Energy Commission (CEC) jurisdiction. The analysis then focuses on projects in the vicinity of the PSPP, along the U.S. Interstate 10 (I-10) corridor between Blythe and Desert Center. These projects include solar projects that have submitted plans of development to BLM, solar projects on private lands, transmission line projects and corridors, a pumped storage project, and a combined-cycle power plant.

The cumulative impacts analysis includes approximately nineteen projects, including the proposed PSPP, in the I-10 corridor. Although not all of these projects are expected to be constructed, and the information below preliminary, sixteen of the projects are energy facilities with a proposed generation of ~7,500 megawatts (MW); of which 92 percent is renewable. Proposed BLM right of ways (ROWs) cover about 100,000 acres, although the facilities themselves will occupy perhaps 20 percent of that. The projects could create up to about 6,000 construction jobs (at peak) and about 450 permanent jobs. According to U.S. Fish and Wildlife Services (USFWS) maps, the projects are located almost entirely outside of desert tortoise critical habitat. These projects must be evaluated to examine possible cumulative impacts in all areas potentially affected by the PSPP, such as biological resources. However, the CEC has previously stated that it is unlikely that all planned projects will be constructed, so the total impacts are likely to be less extensive than the analysis suggests.

5.1.1 CEC and BLM Joint Review (CEQA and NEPA Compliance)

A "Memorandum of Understanding Between the U.S. Department of the Interior, BLM, CDD and the CEC Staff Concerning Joint Environmental Review for Solar Thermal Power Projects", as well as the "BLM & CEC Combined Processing Plan" guide the BLM's and CEC's joint process for discharging their obligations under, respectively, the National Environmental Policy Act (NEPA), 42 United States Code (USC) Sections 4321-4347, and the California Environmental Quality Act (CEQA), California Public Resources Code (PRC) Sections 21000-21177. (Websites where the above materials can be found are provided below in Section 5.1.4, References).

Although CEQA and NEPA differ in several respects, they are sufficiently similar and flexible that a single environmental document can be prepared that will comply with both laws. Table 5.1-1 below summarizes

and compares the content requirements for Environmental Impact Reports (EIRs) under CEQA and Environmental Impact Statements (EISs) under NEPA, and identifies the corresponding sections of this Application for Certification (AFC). Please note that BLM and the CEC have specific procedures for complying with NEPA and CEQA, respectively (see Section 5.1.4, References).

Pursuant to this joint review process, this AFC, as supplemented by the CEC's Preliminary and Final Staff Assessments and Commission Decision, will serve as the CEC's CEQA-equivalent Environmental Impact Report (EIR). See PRC Section 21080.5, 25519(c) and Title 14 California Code of Regulations (CCR) Section 15251(j).

This AFC also will serve to assist BLM in complying with its obligations under NEPA. NEPA requires Federal agencies to examine and disclose the environmental impacts of their proposed actions. NEPA does not mandate a particular substantive result, but simply prescribes a process for reviewing proposed Federal actions. In particular, NEPA requires Federal agencies to prepare an EIS for all "major Federal actions significantly affecting the quality of the human environment." Under regulations promulgated by the Council on Environmental Quality to implement NEPA, an agency prepares a draft EIS in which it evaluates the proposed action and its environmental impacts and compares the proposed action with reasonable alternatives, including a "no action" alternative. The agency then circulates the draft EIS to the public for review and comment. These comments are responded to by the agency when they make any appropriate changes to the EIS, which is then circulated as the final EIS. Finally, the agency selects an alternative and issues a Record of Decision.

An EIS must "specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." A proposed project's purpose and need explain the nature of the problem or issue the proposed action seeks to address (i.e., the reasons the project is being considered), and set the parameters for identifying and analyzing alternatives. An agency may forego detailed analysis and/or selection of alternatives that are ineffective in meeting a project's stated purpose and need. A project's purpose and need also help ensure that the Federal agency at issue complies with its substantive mandates. In this case, BLM must ensure that it complies with the Federal Land Policy Management Act (FLPMA) of 1976, 43 USC Sections 1701-1784, and in particular, FLPMA's ROW provisions at 43 USC Sections 1761-1771. Section 4.0, Alternatives, of this AFC discusses the proposed Project's objectives under CEQA and purpose and need under NEPA.

Regarding the scope of an agency's analysis of alternatives, NEPA requires an agency to "rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." An agency's range of alternatives is evaluated under a "rule of reason" standard, which requires an agency to set forth only those alternatives necessary to permit a reasoned choice. An agency's consideration of alternatives is sufficient if it considers an appropriate range of alternatives, even if it does not consider every available alternative. Section 4.0 of this AFC discusses alternatives to the proposed Project.

Table 5.1-1 Required EIR/EIS Contents and Corresponding AFC Section(s)

Contents of an EIR (CEQA) ¹	AFC Section	Contents of an EIS (NEPA)
	N/A	A cover sheet enumerating the preparing agency, the project and its location, the agency contact person, a very brief abstract of the EIS, and final comment date. (Title 40 Code of Federal Regulations [CFR] 1502.11)

Table 5.1-1 Required EIR/EIS Contents and Corresponding AFC Section(s)

Contents of an EIR (CEQA)¹	AFC Section	Contents of an EIS (NEPA)
Table of contents or index. (Guidelines [Title 14 CCR] Section 15122)	Table of contents	Table of contents and index. (Title 40 CFR 1502.10)
Summary of the EIR, including summaries of proposed actions, significant effects, mitigation, and alternatives. (Guidelines Section 15123)	Section 1.0, Executive Summary	A summary of the EIS, including conclusions, areas of controversy, issues raised (i.e., significant effects), and issues to be resolved (i.e., mitigation and alternatives). (Title 40 CFR 1502.12)
Project description, including location, physical characteristics, objectives, and permits required from other agencies. (Guidelines Section 15124)	Section 2.0, Project Description	Description of the purpose and need fulfilled by the project and its alternatives. (Title 40 CFR 1502.13)
Environmental setting of the project. (Guidelines Section 15125)	Sections 5.1-5.18, Environmental Information	A description of the affected environment. (Title 40 CFR 1502.15)
An analysis of the environmental consequences of the project, including: direct and indirect significant environmental effects of the proposal; cumulative effects (Guidelines Section 15130); unavoidable significant effects; proposed mitigation measures; feasible alternatives; relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; significant irreversible environmental changes; and growth-inducing impacts. (Guidelines Sections 15126, 15126.2, 15126.4, 15126.6)	Section 4.0, Alternatives	Discussion of a range of alternatives, including the proposed action and the no project alternative, comparatively analyzed and including mitigation measures. (Title 40 CFR 1502.14)
	Sections 5.1-5.18, Environmental Information	A description of the environmental consequences of the various alternatives, including: direct, indirect, and cumulative environmental effects (Title 40 CFR 1508.25); growth-inducing effects (Title 40 CFR 1508.8); unavoidable significant effects; proposed mitigation measures; relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and significant irreversible environmental changes. (Title 40 CFR 1502.16)
Effects found not to be significant. (Guidelines Section 15128)	Sections 5.1-5.18, Environmental Information	
	Section 6.0, List of Contributors	A list of preparers. (Title 40 CFR 1502.17)

Table 5.1-1 Required EIR/EIS Contents and Corresponding AFC Section(s)

Contents of an EIR (CEQA)¹	AFC Section	Contents of an EIS (NEPA)
Permits required from other agencies (Guidelines Section 15124)	Sections 5.1-5.18, Environmental Information	A list of the Federal permits required by the action. (Title 40 CFR 1502.25)
A list of organizations and persons consulted (Guidelines Section 15129)	Appendix K, Agency Correspondence	A list of agencies and organizations consulted. (Title 40 CFR 1502.10)
Appendices (Guidelines Section 15147)	Appendices A-L	Appendices. (Title 40 CFR 1502.18)
For a final EIR only, comments received on the draft, a list of commenters, and responses to comments, including revisions to the draft. (Guidelines Section 15132)	N/A	For a final EIS only, comments received on the draft and responses to comments, including revisions to the draft. (Title 40 CFR 1503.4)
For CEC AFC requirements see Appendix B to Title 20 CCR Division 2, Chapter, Article 1 (available at http://www.energy.ca.gov/2008publications/CEC-140-2008-003/CEC-140-2008-003.PDF).		

5.1.2 Environmental Resource Evaluations

The following 17 subsections of this AFC address the various resource areas identified in the CEC Energy Facilities Siting Regulations (Title 20 CCR Section 1704, Appendix B):

- 5.2 Air Quality
- 5.3 Biological Resources
- 5.4 Cultural Resources
- 5.5 Geologic Hazards and Resources
- 5.6 Hazardous Materials Handling
- 5.7 Land Use
- 5.8 Noise
- 5.9 Paleontological Resources
- 5.10 Public Health
- 5.11 Socioeconomics
- 5.12 Soils
- 5.13 Traffic and Transportation
- 5.14 Transmission Line Safety and Nuisance
- 5.15 Visual Resources
- 5.16 Waste Management
- 5.17 Water Resources
- 5.18 Worker Safety

For consistency and ease of review, each of these discipline areas is presented in a standardized format under the following subheadings:

- Laws, ordinances, regulations and standards Compliance (including involved agencies and agency contacts, permit requirements, and permit schedules);
- Affected Environment;
- Environmental Impacts (including Project impacts during both construction and operation phases, and also separately addressing cumulative impacts);
- Mitigation Measures; and
- References.

As mentioned earlier in the AFC, the CEC and BLM are conducting a joint review process for solar energy projects proposed on Federal lands in the California desert. This joint review will involve combined documentation that meets both CEQA and NEPA requirements. The analyses in the following sections are intended to support this combined review process by providing information that meets the requirements of the CEC power plant siting regulations and BLM's NEPA obligations.

5.1.3 Cumulative Evaluation Approach

The cumulative impacts discussion included in the impact analysis portion of each resource area (e.g., air quality, noise, biological resources) addresses the potential cumulative impacts of the Project “when viewed in connection with the effects of probable future projects” (CEQA requirement), and/or “when added to other past, present, and reasonably foreseeable future actions” (NEPA requirement).

The approach to cumulative impacts of the Project considers “past” projects to be those that have completed construction and are in operation. These projects are included in the environmental baseline, described in the Affected Environment portion of each resource area. Since the Project impact analysis in each resource area assesses impacts in terms of changes to existing environmental conditions, past projects are not separately addressed in the cumulative analysis. “Present” projects include those that are currently under construction or have been fully permitted such that they are likely to be part of the existing environment when the Project has begun construction; such projects are considered appropriate for inclusion in the AFC cumulative analyses.

“Probable” or “reasonably foreseeable” future projects are those for which a formal application has been filed. The vast majority (14 of 18) of the projects that are specifically considered in the cumulative scenario for the Project (see Table 5.1-1) are solar power or transmission line projects on Federal lands managed by the BLM; the working definition of “probable” or “reasonably foreseeable” projects on BLM lands is based on whether or not a draft or final Plan of Development (POD) has been filed with the BLM by an applicant. Of the four projects specifically considered that are not located or partially located on BLM land, two are fully permitted, and two are in permitting processes in which neither the BLM nor the CEC is involved.

5.1.3.1 Geographic Context for Cumulative Analysis

Cumulative impacts occur in a geographic context, but the area over which cumulative effects potentially would be of concern varies for different environmental resource areas. For example, noise and vehicular traffic impacts usually are evaluated in localized terms, impacts on protective services and utilities require evaluation of larger service areas, and the scope of water resources and air quality impacts can involve an entire groundwater basin and/or be affected by topographic features (e.g., mountains). In short, the scope of cumulative impacts evaluations varies spatially, with considerably variability based on the nature of the environmental resource area being considered.

In a broad geographic context, solar and wind development projects are currently proposed on over one million acres of BLM lands in California and Nevada. According to the BLM website, as of June 2009, there were a total of 65 solar applications covering approximately 577,075 acres, with a combined proposed generation of 47,480 megawatts (MW). All but one application occurs in the CDD. There are also 93 wind energy applications covering approximately 815,914 acres, with 64 of the applications covering 462,462 acres in the CDD. Regional cumulative impacts could occur as a result of implementation of the PSPP in conjunction with these solar or wind energy projects.

There are additional solar thermal projects proposed on private lands that are solely within the licensing jurisdiction of the CEC. As of July 2009, there were a total of four solar thermal project applications covering approximately 4,600 acres of private land with proposed capacity of 977 MW on non-BLM lands under CEC jurisdiction. Several of these solar projects are proposed in the southeastern desert of the State, but none are in the I-10 corridor. There are also solar photovoltaic (PV) projects on private lands that are not under the jurisdiction of either the CEC or BLM.

There are a number of proposed non-renewable or hybrid combined-cycle, solar thermal power plants on private land that come under CEC jurisdiction. These include the Victorville 2 and Palmdale Hybrid Power Projects and a combined-cycle power plant in Blythe. Finally, a number of east-west transmission line projects are proposed along I-10. The West-Wide Energy Corridor Programmatic Environmental Impact Statement (PEIS) has delineated energy corridors running through the region, including the east-west corridor along I-10 mentioned previously (to which the Project would interconnect), and two north-south energy corridors meeting I-10, one near Desert Center west of the PSPP and a second approximately 40 miles east of the Project near Blythe.

While the discussions in the various environmental resource areas often consider a broad regional perspective, the specific projects that are the primary focus of the cumulative analyses in the Project AFC are the energy projects identified in the I-10 corridor of eastern Riverside County. For purposes of the AFC, we define this area to include projects from the vicinity of Desert Center east to the area around the City of Blythe, a distance of approximately 50 miles. Each of these projects is identified and described briefly in Section 5.1.2.4. These projects include solar thermal and PV projects on BLM and private lands, the Eagle Mountain pumped storage project, a combined-cycle power plant, a number of east-west transmission line projects, and energy corridors delineated by the West-Wide Energy Corridor PEIS.

Cumulative impacts analysis also must consider the variable of time as well as geography. In some resource areas, the overlap in project construction schedules is particularly important because potential impacts that are enhanced by large overlapping construction work forces (e.g., impacts on traffic and socioeconomic conditions and infrastructure) could be significant. However, these impacts are short-term and temporary because solar project operation-phase work forces are small compared to the construction phase.

There are uncertainties in any large-scale, complex, and costly industrial project as it moves from concept toward fruition. However, the level of uncertainties with some of the proposed renewable energy projects in the California desert is unusually great, as discussed in the section below.

5.1.3.2 Likelihood of Implementation of Cumulative Projects

Cumulative analysis under both CEQA and NEPA require consideration of the likelihood that the proposed projects actually will occur. To quote the CEC Staff in the Ivanpah Solar Electric Generation System Preliminary Staff Assessment:

“[While there is]...a very large number of applications to BLM, it is unlikely that all of these projects will be constructed for the following reasons:

- Not all developers will develop the detailed information necessary to meet BLM and Energy Commission standards. Most of the solar projects with pending applications are proposing generation technologies that have not been implemented at large scales. As a result, preparing complete and detailed PODs is difficult, and completing the required NEPA and CEQA documents is especially time-consuming.
- After approval by the appropriate Lead Agency under CEQA and NEPA, (generally the CEC and/or BLM), all permits must be obtained. The large size of these projects may result in permitting challenges related to endangered species mitigation requirements, and other issues.
- Also after project approval, construction financing must be obtained (if it has not been obtained earlier in the process). The availability of financing will be dependent on the status of competing projects, the laws and regulations related to renewable project investment, and the time required for obtaining permits.”

Because it is impossible to predict which projects will be developed, all of the identified projects must be considered. However, the fact that many of these projects may not be constructed should be kept in mind for each of the cumulative analyses.

The more than a dozen renewable energy (plus one gas-fired combined-cycle plant) in the prime solar area of the I-10 corridor on public or private lands must successfully compete for Power Purchase Agreements with utility organizations who are working to meet their State-mandated Renewable Portfolio Standards. In addition, the projects in the I-10 corridor are competing with many more renewable energy projects proposed throughout the California desert to different BLM field offices (Barstow, Needles, Ridgecrest, etc.).

5.1.3.3 Solar Energy Development PEIS

The BLM and the Department of Energy (DOE) are currently preparing the Solar Energy Development PEIS. The PEIS will evaluate the potential for large-scale solar development on BLM-managed lands in California, Arizona, Colorado, New Mexico, Nevada, and Utah. The PEIS will also evaluate the impacts of such development and develop standard mitigation measures for minimizing those impacts.

As described on the Project’s website (<http://www.solareis.anl.gov/>), the BLM is considering whether to establish an agency-wide solar energy development program to supplement or replace existing policy, and to amend land use plans in the six-state study area to adopt the new program. The agency also expects to identify BLM-administered land that may be environmentally suitable for solar energy development and land that would be excluded from such development. The PEIS will consider whether designation of additional electricity transmission corridors on BLM-administered lands is necessary to facilitate utility-scale solar energy development. Similarly, through this PEIS the DOE is considering a program of solar energy environmental policies and mitigation strategies as guidance to all DOE-funded solar projects.

The PEIS is not intended to eliminate the need for site-specific environmental review for individual utility-scale solar projects. Site-specific environmental reviews are expected to be tiered to the PEIS and to be simplified and improved by it. For each of 24 (geographic) solar energy study areas in the six states (the I-10 corridor among them), the BLM intends to complete as much of the site-specific upfront environmental analysis as possible in order to determine whether the areas are appropriate for designation as solar energy zones.

Under the No Action EIS alternative, the DOE and the BLM would continue to evaluate solar energy projects on a case-by-case basis. Under the proposed action, the BLM and DOE will create a reasonably foreseeable development scenario to define the potential for future utility-scale solar energy development activities over a 20-year study period.

The release of the Draft Solar Energy Development PEIS was originally scheduled for spring of 2009. However, BLM and DOE decided to postpone completion of the Draft PEIS so that the PEIS could be made consistent with a Department of the Interior policy goal of identification and prioritization of specific locations best suited for large-scale solar energy production. The BLM has requested public comment on the 24 tracts of BLM-administered land identified for in-depth study for solar development.

As noted on the Project website in August 2009, the draft PEIS release schedule will be determined after the evaluation of comments from the current scoping period concerning the solar energy study areas (ending September 2009). The draft PEIS will not be available for several months after the close of the comment period at the earliest. For these reasons, the PEIS is not available to provide guidance for the preparation of the PSPP AFC cumulative impact analyses.

5.1.3.4 Cumulative Projects

As discussed above, the focus of the cumulative analyses in this AFC is to evaluate the Project's impacts combined with impacts of past, present, and reasonably foreseeable projects located within the I-10 corridor. This extent encompasses all relevant projects within the geographic area of responsibility of BLM's Palm Springs Field Office. Relevant projects are those that have submitted draft or Final PODs to BLM. There are several solar developers who have submitted applications to the Palm Springs BLM that are "second in line," meaning that they proposed development of sites for which applications have already been submitted. Other developers have submitted initial applications but have not taken the step of submitting a draft or complete POD. Neither "second in line" applications nor applications without PODs are addressed in this AFC.

It should be noted that PODs are early project documents, often with quite limited and preliminary information in terms of project characteristics, site environmental conditions, and implementation schedules. However, these documents provide the best available data and the cumulative analyses in this AFC are based on the projects as described in the PODs or other available project documents. Also, it is important to note that each of the cumulative proposed projects will undergo its own review process, and will be required to comply with applicable regulatory requirements and to mitigate impacts that are identified in the review process.

The information on the solar projects on BLM land is taken from the applicable PODs submitted to the BLM Palm Springs Field Office. Other than the projects discussed below, there are no other renewable energy projects (e.g., wind, solar, or geothermal) or other projects for which PODs have been submitted to the Palm Springs Field Office. Information was also requested from the County of Riverside and the City of Blythe concerning other projects in the vicinity of the I-10 corridor that should be considered. One additional PV project within the City of Blythe and one small PV project on unincorporated County land near Blythe identified from these sources are included in the cumulative projects list shown below.

Transmission line projects considered include the Devers-Palo Verde #2 (DVP2) transmission line, the Desert Southwest Transmission Project, the Blythe Energy Project transmission lines, and the West-Wide Energy Corridor PEIS proposed Section 368 energy corridors. Other (non-renewable) energy projects included in the analysis include the Eagle Mountain Pumped Storage Project and the Blythe II natural gas-fired power plant.

The cumulative projects considered in this AFC are shown on Figure 5.1-1, taken from the CEC map titled "Renewable Energy Transmission Initiative Phase 2A Draft Maps" and are summarized in Table 5.1-1. As noted above, not every one of these projects has been included in the AFC cumulative analyses (including, for example, projects that were second in line or for which no draft or final POD had been submitted) have not been included.

Table 5.1-2 Summary of PSPP Cumulative Projects

Project Name	Project Footprint (acres)	MW	Technology	Construction	Water Usage
Solar Millennium LLC/ Chevron Energy Solutions, Palen Solar Power Project (CACA 048810)	BLM ROW: 5,200 Facility: 2,970	500	Solar Thermal (troughs)	Average: 565 Peak: 1,100	Construction: 1,500 acre feet (af) Operation: 300 af per year (afy)
Solar Millennium LLC/ Chevron Energy Solutions, Blythe Solar Power Project (CACA 048811)	BLM ROW: 9,400 Facility: 5,950	1,000	Solar Thermal (troughs)	Average: 600 Peak: 1,004	Construction: 3,100 acre feet (af) Operation: 600 afy
Optisolar (now First Solar), Desert Quartzite Solar Farm (CACA 49377)	BLM ROW: 7,724 Facility: 150	601	Photovoltaic	Average: 250 Peak: 400-500	Construction: 27 af Operation: 3.8 afy
Optisolar, (now First Solar), Desert Sunlight Solar Farm (CACA 48649)	BLM ROW: 25,000 Facility: 5000,- 6,000	550	Photovoltaic	Average: 250 Peak: 400-500	Construction: 27 af Operation: 3.8 afy
Bullfrog Green Energy, LLC, Mule Mountain Solar Project (CACA 49097)	BLM ROW: 6,629 Facility: 597	500	Photovoltaic	35-50	6,000 gal/mo
Genesis Solar, LLC, Genesis Solar Energy Project (CACA 48880)	BLM ROW: 4,640 Facility: 1,800	250	Solar thermal (troughs)	Average: 650 Peak: 950	2,000 to 2,500 afy
enXco, Mule Mountain Soleil Project (CACA 49488)	BLM ROW: 2,100 Facility: 1,640	200	Photovoltaic	Average: 200 Peak: 500	Unknown
enXco, McCoy Soleil Project (CACA 49490)	BLM ROW: 13,959 Facility: 1,808	136	Power tower	Average: 250 Peak: 400-500	Construction: Unknown Operation: 575 -600 afy
enXco, Desert Lily Soleil Project (CACA 49492)	BLM ROW: 1,216 Facility: unknown	100	Photovoltaic	Average: 100 Peak: 300	Construction: < 20 af Operation: < 5 afy
Bullfrog Green Energy, LLC, Big Maria Vista Solar Project (CACA 49702)	BLM ROW: 23,040 Facility: 1,200	500	Photovoltaic	35-50	Operation: 6,000 gal/mo
Chuckwalla Solar I LLC, Chuckwalla Solar I Project (CACA 48804)	BLM ROW: 4,083 Facility: 125	200	Photovoltaic	Average: 150 Peak: 240	Unknown
Solel, Mojave Solar Park/Desert Lily Project (CACA 49494)	BLM ROW: 4,000 Facility: 3,000	500	Solar thermal (troughs)	Average: 800 Peak: 1,800	Operation: 5,000 afy
U.S. Solar, Blythe Airport Solar 1 Project	BLM ROW: --- Facility: 640	100	Photovoltaic	Unknown	Unknown
First Solar, Blythe PV Project	BLM ROW: --- Facility: 200	7.5	Photovoltaic	Unknown	Unknown
Eagle Crest Energy Co., Eagle Mountain Pumped Storage Project (FERC Project 12509)	Private Land Acreage: Minepiti	1,300	Hydroelectric	Peak: 500	Initial Reservoir Fill: 23,000 af Water replacement: 1,800 afy

Table 5.1-2 Summary of PSPP Cumulative Projects

Project Name	Project Footprint (acres)	MW	Technology	Construction	Water Usage
Blythe Energy Project II	BLM ROW: -- Facility: 76	520	Combined-cycle	Average: 232 Peak: 387	Operation: 3,200 afy (in combination with BEP I)
Blythe Energy 230-kV Transmission Lines	74.1 miles	NA	Transmission line	162	Construction: 224,000 gal/day
DVP2 500-kV / 230-kV Transmission Line Project	New: 230 mil/ upgrades: 50 miles Reconfig: 40 miles	NA	Transmission line	Average: 211 Peak: 211	Construction: Unknown
Desert Southwest 500-kV Transmission Line	118 miles	500 kV	Transmission line	Average: 71 Peak: 89	Construction: 1.35-1.5 af

Sources: PODs for projects on BLM land; various others (project environmental documents, personal communication, web searches)

Solar Millennium/Chevron Energy Solutions, Blythe Solar Power Project (CACA 048811)

The Blythe Solar Power Project is a 1,000-MW solar thermal project using parabolic trough technology; the project's output will be generated by four identical 250-MW plants. The project is proposed on a 9,400-acre BLM ROW north of I-10 and approximately 8 miles west of Blythe; approximately 5,600 acres of this total will be disturbed. The Project will include a 500-kV transmission line to interconnect with the regional grid at the proposed Southern California Edison (SCE) Colorado River substation. The project will utilize dry cooling and will need approximately 600 afy of water for all uses to be obtained from site groundwater.

Construction is scheduled to begin at the end of 2010 and the four units will come online from 2013 through 2015; the total construction period is estimated at 69 months. Construction employment is expected to average approximately 600 workers and to peak at approximately 1,000 workers. Total operational employment will be approximately 220. The site is located in BLM Multiple Use Class Moderate (MUC Class M) lands. Special-status species on the site include desert tortoise (although it is poor quality tortoise habitat) and burrowing owl. Cultural investigations have identified both prehistoric and historic cultural resources; although additional investigations will be needed, there is no current indication that cultural resources are likely to be a significant constraint on Project development.

Optisolar (subsequently acquired by First Solar), Desert Quartzite Solar Farm (CACA 49377)

The Desert Quartzite project is a 601-MW solar PV power generating facility, proposed on public lands on a 7,724-acre site (total size of BLM ROW application). The site is located on the south side of I-10, approximately eight miles southwest of the City of Blythe in eastern Riverside County. Since the site would interconnect to the proposed SCE Colorado Substation adjacent to the Desert Quartzite facilities there would be essentially no offsite transmission line. The existing Devers-Palo Verde #1 transmission line runs through the southern portion of the Desert Quartzite site. The Mule Mountain Area of Critical Environmental Concern (ACEC) is adjacent to the southern portion of the site. The POD indicates that facilities will be laid out to provide a "reasonable" buffer between the project and the ACEC. The site is characterized as desert bush scrub and dry desert wash woodlands, and the special-status desert tortoise is found on site in what is described as low-quality (Class III) desert tortoise habitat. The POD indicates that historic cultural resources may occur within the project area, but that no studies had yet

been performed. The POD indicates a three- to four-year construction schedule assuming a possible construction start of mid-2010, with the facility coming online in roughly 2013 to 2014.

Water use would total approximately 27 af over the entire construction period; operational water use would be no more than 3.8 afy. Water will be obtained either from an onsite well or will be delivered to the site in trucks. The POD indicates an average construction workforce of 250 (peak of 400-500); operational employment would be less than 20 workers.

Optisolar (subsequently acquired by First Solar), Desert Sunlight Solar Farm (CACA 48649)

The Desert Sunlight Solar Farm will be a 550-MW solar PV electrical generating facility proposed on BLM-managed public lands north of Desert Center for a ROW that would cover over 25,000 acres. This ROW would be much larger than the ultimate facility footprint (5,000 -6,000 acres) and encompasses the generating facilities and a number of possible alternative transmission corridors to interconnect the facilities with the regional grid at a number of possible locations for SCE's planned Red Bluff Substation south of the project site. The Desert Sunlight site is located in BLM MUC Class M lands. Special-status species found on the site include desert tortoise (although it is considered low-quality tortoise habitat), Western burrowing owl, desert kit fox, and Le Conte's thrasher. Reconnaissance level investigations identified no significant cultural resources but there has been limited study of the area.

The POD indicates a three-year construction schedule with an average workforce of 250 (peak of 400-500). The operational workforce would be approximately 10 workers. The project would use approximately 27 af of water total during construction and about 3.8 afy during operations (primarily for infrequent mirror cleaning).

Altera, Mule Mountain Solar Project (CACA 49097)

The Mule Mountain Project is a 500-MW concentrating PV power generating facility to be developed in three separate 170-MW phases. The project is proposed on 6,629 acres of BLM-managed land south of I-10, west of Blythe (and adjacent to the Desert Quartzite Solar Farm site discussed above). The POD indicated that there were several transmission options under consideration, one of them being the proposed SCE Colorado Substation close to the site. Approximately nine percent of the total site acreage would be impacted by project development. As indicated in the POD, construction of the first 170-MW phase is planned for early 2011 and would continue until complete construction of the third phase in mid-2013. Because of the phased construction schedule, construction labor would be no more than 35-50 workers; an operational workforce of less than 20 workers would be needed. Water needs would be very small and would be used mostly for mirror washing; water would be supplied either by an onsite well or trucked in monthly (two truckloads per month for mirror washing totaling approximately 6,000 gallons). Primary identified special-status species are the Colorado fringe-toed lizard and perhaps Western burrowing owl. The site is located on BLM MUC Class M lands and, based on limited knowledge, the POD indicates that it is considered of low archaeological sensitivity.

Genesis Solar, LLC, Genesis Solar Energy Project (CACA 48880)

The Genesis Solar Energy Project is proposed on a 4,640-acre BLM ROW approximately two miles north of I-10 and 25 miles west of Blythe. Formerly known as the Ford Dry Lake Project, the facility would be a 250-MW solar thermal generating facility utilizing parabolic trough technology. The POD indicates an assumed December 2010 project approval date (by both BLM and the CEC) and a 25-month construction schedule. The Genesis project facility footprint would be 1,800 acres; the project would include a four-mile offsite natural gas pipeline and a 5.5-mile transmission line interconnecting with the currently under-construction Blythe Energy Center to Julian Hinds Transmission Line. The project is proposed with wet cooling and a total estimated water use of 2,000 to 2,500 afy (85 percent for cooling). The construction work force would average 650 and peak at 950 workers; operating phase employment is estimated at 65.

The Project has performed desert tortoise and Western burrowing owl surveys as well as other biological surveys. Identified special-status species include Mojave and Colorado fringe-toed lizards, loggerhead shrike, Western burrowing owl, short-eared owl, prairie falcon, and northern harrier. No live desert tortoise were found but there were burrows and bones on the site and tracks and carcasses in the surrounding area. A Class III cultural resources survey found 33 isolates and 22 sites (16 prehistoric, five historic, and one both prehistoric and historic). The site is located on BLM MUC Class M lands.

enXco, Mule Mountain Soleil Project (CACA 49488)

The Mule Mountain Soleil project is a proposed 200-MW solar PV generating facility to be developed at a site north of I-10 and 10 miles west of Blythe. The site would be on a 2,100-acre BLM ROW (including 40 acres for the transmission line ROW), with the project expected to disturb 1,640 acres of this total. Approximately 10 percent of the site would be cleared; other vegetation over 18 inches in height would be removed to ensure clearance for the PV panels (which are built low to the ground). The project would come online in a phased manner of a 12- to 24-month period with the first phase completed in late 2013; the entire project is to be completed by the end of 2014 to coincide with the planned startup of the DVP2 Transmission Line. The construction workforce would average 200 workers and peak at 500.

The Mule Mountain Soleil site is expected to contain desert tortoise and Gila woodpecker, based on limited literature research only. No cultural resources are known on the site, but the presence of cultural resources nearby suggests that encountering some onsite resources would be expected in project studies. The site is in BLM's MUC Class M land use category.

enXco, McCoy Soleil Project (CACA 49490)

The 300-MW McCoy Soleil project would use Solar Reserve's power tower solar thermal technology. The project is proposed on a total BLM ROW of 13,959 acres (plus 136 acres for the transmission line), at a site approximately 10 miles north of Blythe. The project would include a 14-mile transmission line to the proposed SCE Midpoint Substation south of I-10. The McCoy Soleil project would involve a 2.5-square mile heliostat (mirror) field with all the heliostats focused on a central 600-foot tall tower, of which the top 60 feet is the solar receiver. The sun's heat energy would be used to power a conventional steam turbine; this Solar Reserve technology includes the use of molten salt for thermal storage which extends the time period during the day that the solar energy can generate electricity for the grid beyond the daytime hours. The McCoy Soleil project would temporarily disturb a total of 1,911 acres during construction and 1,808 acres permanently.

Project construction would take 30 months with commercial operation timed to coincide with the planned DVP2 Transmission Line on line date at the end of 2013. Water consumption is estimated at 1,000 afy during the first year of construction and 150 afy for the remainder of the construction phase; operation phase water use is estimated at 575 to 600 afy. Because of the site's location west of the Colorado River, the POD indicates that providing water to the project would require a contract through the U.S. Bureau of Reclamation for groundwater extraction. Construction manpower would average approximately 250 and peak at 400 to 500. Operational manpower is estimated at 44 personnel. The site is mostly creosote bush scrub and several special-status species are considered possible on the site, including desert tortoise and Harwood's milkvetch.

enXco, Desert Lily Soleil Project (CACA 49492)

The Desert Lily Soleil Project would be a 100-MW PV power plant on 1,216 acres of BLM ROW, six miles north of Desert Center. The Desert Lily would involve a five- to eight-mile transmission line (an additional nearly 400 acres of BLM ROW) to the planned SCE Red Bluff Substation near Desert Center. According to the POD, the project would begin construction early in 2012 and become operational at the end of 2013. The construction workforce would average about 100 workers with a peak of approximately 300; 12 people would be required to operate and maintain the facility. Access to the site would be from Rice

Road. The site is on BLM land use Class L. Construction would require less than 20 ac of water and operation would require less than 5 ac. At the time of POD submittal, preliminary environmental studies were underway but no results were available; desert tortoise and the Coachella milkvetch were identified as special-status species of concern.

Bullfrog Green Energy, LLC, Big Maria Vista Solar Project (CACA 49702)

The 500-MW concentrated PV Big Maria Vista Solar Project is proposed on a BLM ROW of 23,040 acres on a site 12 miles northwest of Blythe. The project is proposed to be built in three 167-MW phases with each phase requiring a nine-month construction period. Completion of the three phases would be expected in early 2011, 2012, and 2013 and each would come online in the middle of the same years. A total of approximately 1,200 acres would be directly impacted by the Big Maria Vista project, about four percent of the total ROW area. The project would use either onsite wells or purchased offsite water. Water needs would be primarily for mirror washing; wash water would be brought in two truckloads (total of 6,000 gallons) per month if necessary. The Big Maria Vista project would require a construction workforce of 35 to 50 and an operational work force of less than 20. The POD indicated that several transmission options are still under consideration.

The POD states that the project area is considered of low archaeological sensitivity based on limited research, and the special-status species considered likely to be encountered include the Colorado Desert fringe-toed lizard, Palm Springs pocket mouse, Palm Springs round-tailed ground squirrel, as well as desert tortoise and burrowing owl.

Chuckwalla Solar I LLC, Chuckwalla Solar I Project (CACA 48808)

Chuckwalla Solar I Project would be a 200-MW concentrating PV power plant on a site approximately one mile north of Desert Center, north of I-10. The Chuckwalla Solar I Project is proposed on a 4,083-acre BLM ROW and would be developed in several phases. Construction of the Chuckwalla Solar I Project would commence at the beginning of 2011 with completion of the first 25-MW phase in June 2011, the second 25-MW phase in December 2011, and two more 25-MW phases in June and December of 2012. The final 100-MW phase would be completed at the end of 2013. The Chuckwalla project's point of interconnection with the regional grid would be at a new switchyard on the site that taps into an existing SCE 161-kV transmission line that crosses the Chuckwalla Solar I Project site. The facility footprint would be approximately 125 acres (3.1 percent of the total site); construction would disturb an additional 67 acres or 1.6 percent of the site.

Site access would be from State Highway 177. Construction employment would average approximately 150 workers and peak at as many as 240. Operation would require approximately 10 employees. The site's dominant plant communities are desert dry wash woodland and Sonoran desert scrub. A biological resource assessment found no Federal- or State-threatened or endangered plant or wildlife species. No desert tortoise or ferruginous hawk were observed, but focused surveys are planned for desert tortoise, and the Coachella milkvetch and desert unicorn plants.

Solel, Mojave Solar Park/Desert Lily Project (CACA 49494)

The Mojave Solar Park (also referred to as "Desert Lily") is proposed for a roughly 4,000-acre BLM ROW adjacent to the eastern boundary of Joshua Tree National Park and State Highway 177. The Desert Lily would be a parabolic trough solar thermal facility with power output expected to be 500-MW, although the POD indicates that size and design were not finalized at the time of POD submittal. The facility solar fields (rows of parabolic mirrors) would cover approximately 3,000 acres. The facility would include a 10-mile natural gas pipeline and an 11-mile transmission line. Peak labor requirements were estimated at 1,800 workers with an average of approximately 800. The initial POD from which the above information was taken contained minimal data on site environmental conditions, but focused on outlining general approaches to developing the needed information and complying with regulatory requirements.

The POD indicates that the facility would be wet-cooled with total water use of approximately 5,000 afy, supplied from onsite wells, with the brackish water treated before use. The Desert Lily site is described as being desert creosote brush. At the time of POD submittal in late 2007, a project schedule was expected that showed permitting and conceptual design completed in November 2009, and construction beginning in June 2010 and ending in December 2012 (18-month construction period). As no AFC has been submitted or EIS prepared, this appears one of the projects that is least likely to attain its stated schedule objectives.

U.S. Solar, Blythe Airport Solar 1 Project

The Blythe Airport Solar 1 Project would be a solar PV power generating facility located on 640 acres of airport property on the northeast portion of the Blythe Municipal Airport east of the Applicant's Blythe project. According to City of Blythe Planning Department staff, the Airport Solar I currently is "in the environmental stages and anticipating a pretty aggressive construction timetable." The project developer, U.S. Solar, would lease an initial 120 acres for a 20-MW PV facility with an option to lease an additional 520 acres to allow expansion of the project up to 100-MW total. The PV system would consist of modules, supports, inverters, foundations, and an underground cabling system. The initial 20-MW PV project will consist of four 5.1-MW PV arrays.

First Solar, Blythe PV Project

First Solar has proposed to develop a PV project on 200 acres of private land about 1.5 miles south of the Blythe Municipal Airport. Initial plans are for the project to produce 7.5-MW with an eventual capacity of 21 MW. This First Solar project has been approved by the California Public Utilities Commission (CPUC) and by the County of Riverside.

Eagle Crest Energy Company, Eagle Mountain Pumped Storage Project (FERC 13123-002)

In June 2009, Eagle Crest Energy filed its Final Application with the Federal Energy Regulatory Commission (FERC) for the proposed Eagle Mountain Pumped Storage project. The project would occur at the site of the Eagle Mountain iron ore mine north of Desert Center, which is no longer in operation. It would use off-peak energy to pump water from the project's lower reservoir to the upper reservoir during periods of low electrical demand and generate on-peak energy by conveying water from the upper to the lower reservoir through turbine generator units during periods of high electrical demand. The upper and lower reservoirs would be formed from existing mining pits; the facility would provide up to 1,300 MW of power.

The reservoirs would be filled initially from using approximately 24,200 af of local groundwater. Upper reservoir capacity would be 20,000 af and lower reservoir capacity would be 21,900 af; water replacement (for evaporation and seepage) would be approximately 1,802,360 afy. FERC reviews indicate using groundwater would place the Chuckwalla groundwater basin in overdraft for about the first two years and groundwater levels would not return to pre-project levels for 17 years. However, the proponent's project documents indicate the Chuckwalla groundwater basin can supply makeup water without overdraft. The Eagle Mountain Pumped Storage Project would involve a 13.5-mile transmission line to the planned SCE Red Bluff Substation near Desert Center. Project construction would take four years beginning in 2012. Peak construction would involve about 500 people.

Special-status species potentially present at the Eagle Mountain Pumped Storage Project site include the Coachella Valley milkvetch, desert tortoise, American peregrine falcon, Gila woodpecker, and burrowing owl. The Eagle Mountain Pumped Storage Project includes approximately four to five acres in desert tortoise habitat including two acres in the Chuckwalla Desert Wildlife Management Area. No significant cultural resources were identified within the project boundaries during surveys.

Blythe Energy Project II

The Blythe Energy Project II is a proposed nominal 520-MW gas-fired combined-cycle plant located in Blythe, California. The site is located near I-10 and the Blythe airport, about five miles west of the City of Blythe. Blythe Energy Project II is proposed on a 76-acre site adjacent to the west side of the Blythe Energy Project, which is an existing 507-MW gas-fired combined-cycle power plant.

Blythe Energy Project II may utilize some existing facilities at the Blythe Energy Project site. Water will be supplied by two deep onsite groundwater wells and would use approximately 3,300 afy for cooling and other purposes. Blythe Energy Project II has been ordered by the U.S. Bureau of Reclamation to develop a water conservation offset program to offset its groundwater use. After maximum recycling of water through the plant, wastewater will be discharged to a new evaporation pond resulting in a zero-liquid discharge system. Both Blythe Energy Project and Blythe Energy Project II are wet-cooled plants that are estimated to consume approximately 3,200 afy in total. BEP II would connect to the Buck Boulevard Substation, which in turn would tie in to a proposed approximately 118-mile long, 500-kV single circuit transmission line connecting to Devers Substation north of Palm Springs, California. The Imperial Irrigation District (IID) has proposed this new transmission line, referred to as the Desert Southwest Transmission Project (described below).

BEP II is licensed but is not yet under construction. Construction is expected to last approximately 18 to 22 months. The average workforce during construction will be approximately 232 personnel with a peak construction workforce of approximately 387 personnel. Operation will require 20 full time employees. The project is proposed on a highly disturbed site; burrowing owls were found during monitoring of the natural gas line. However, the area had been categorized as potential desert tortoise and Harwood milkvetch habitat. One archeological resource on the project site is being treated as eligible for the National Register of Historic Places (NRHP) and California Register of Historic Resources (CRHR) until determination for eligibility is made.

Blythe Energy Project Transmission Lines Modification

Blythe Energy, LLC, proposes to develop two new transmission lines and a new substation near the Blythe Energy Project in Blythe, California. The proposed modifications would be located entirely within Riverside County, between the Western Buck Substation situated adjacent to the Blythe Energy Center and the Julian Hinds Substation near Hayfield, California.

Buck to Julian Hinds Transmission Line. The project would involve upgrades to Buck Substation, locate adjacent to the Blythe Energy Center, and installation of approximately 67.4 miles of new 230-kV transmission line on concrete pole structures to the Julian Hinds Substation located to the west. Upgrades also would be required at the Julian Hinds Substation. Along most of its length, the Buck to Julian Hinds transmission line component would be located within a 95 foot ROW adjacent to and north of SCE's existing Devers-Palo Verde transmission line.

Buck to Devers-Palo Verde Transmission Line. The 6.7-mile Buck to Devers-Palo Verde transmission line component to the south would be located adjacent to an existing IID 161-kV transmission line. The proposed new SCE Midpoint substation for interconnection would be located adjacent to SCE's existing Devers-Palo Verde 500-kV transmission line.

Blythe Energy expects to employ up to approximately 162 construction workers over an 8- to 12-month construction period. The project would affect species listed by the USFWS, desert tortoise critical habitat, the BLM Chuckwalla Desert Wildlife Management Area (DWMA) (designated for recovery of desert tortoise), and the BLM Chuckwalla Valley Dune Thicket ACEC. Approximately 314 acres of desert tortoise habitat are expected to be impacted. Various types of cultural resources exist within the project area and cultural resources that cannot be avoided have been evaluated for the NRHP and CRHR.

Construction water use will be approximately 224,000 gallons per day while no additional operation water use is expected.

Devers–Palo Verde #2 Transmission Line

SCE proposed to construct the DPV2 Transmission Line, which, as originally proposed included a new 230-mile 500-kV line from the Harquahala Substation (in Arizona) to SCE's Devers Substation (in North Palm Springs, California). The 500-kV portion would follow the existing SCE 500-kV transmission line, DPV1. The DPV2 project also includes upgrades to an additional 50 miles of 230-kV transmission lines west of the Devers Substation. Forty miles of 230-kV transmission line from Devers Substation to San Bernardino Junction at the western end of San Timoteo Canyon would be reconfigured and two separate 230-kV corridors, from San Bernardino Junction to SCE's Mountain View Substation and from San Bernardino Junction to SCE's Vista Substation, would be reconducted. The entire project would span 278 miles, with approximately 176 miles in California and 102 miles in Arizona.

The CPUC approved the DPV2 Project in early 2007. The Final EIR/EIS was issued in late 2006. Average and maximum construction workforce is estimated to be 211 personnel for construction of the Devers-Harquahala 500-kV Segment and 174 personnel for construction of West of Devers segment. The project may result in impacts to listed and sensitive wildlife and plant species, such as desert tortoise and bighorn sheep. The Devers-Harquahala segment would also create permanent impacts to the character of the following recreation or wilderness areas: Kofa National Wildlife Refuge, Chuckwalla Valley Dune Thicket ACEC, and Alligator Rock ACEC. The Devers-Harquahala segment would have adverse effects on historic properties (historical structures and prehistoric and historic archaeological sites that are eligible for listing on the NRHP and CRHR and significant paleontological resources during construction and operation. The majority of construction impacts would occur during transmission line stringing activities over roads, including I-10, and could require temporary road closures. No water requirements were stated. The Final EIR/EIS found the alternatives in the areas near Palo Verde Nuclear Generating Station and the Alligator Rock ACEC to be environmentally superior/preferred.

According to the SCE website, the project was denied by the Arizona Corporation Commission in 2007, and SCE will not pursue authorization of the Arizona portion of the project at this time. SCE is currently waiting for authorization from CPUC to begin construction for the California portion.

Desert Southwest Transmission Line

The Desert Southwest Transmission Line proposes to construct, operate, and maintain a new, approximately 118-mile transmission line from a new substation/switching station near the Blythe Energy Project to the existing Devers Substation located approximately 10 miles north of Palm Springs, California. The project would operate at 500 kV and would provide increased transmission line capabilities from the Keim Substation/switching station near the Blythe Energy Project to the Devers Substation to meet transmission requirements. For the majority of the alignment, the transmission line would be located adjacent to SCE's existing 500-kV DPV1 transmission line and DPV2 ROW. In addition, the proposed project would include a new substation/switching (referred to then as Midpoint, now called Colorado River), also mentioned above for the Buck to Devers-Palo Verde transmission line), located at the intersection of the proposed line with the existing DPV1 line. From the area near the Blythe Energy Project to the new substation, the new line would be constructed as a double circuit line or two parallel lines. In the future, a new substation could be built on Dillon Road adjacent to the existing transmission line facilities near Indio, California, to connect the proposed transmission line to IID's existing Coachella Substation.

A Final EIS/EIR was prepared by IID and BLM in late 2005. Approximately 1.35 to 1.5 af of water would be needed to mix concrete for transmission tower footings. Ten special-status species were observed during the 2002 biological surveys along the proposed route, including the desert tortoise, Coachella Valley fringe-toed lizard, foxtail cactus, Colorado desert fringe-toed lizard, chuckwalla, black-tailed

gnatcatcher, burrowing owl, loggerhead shrike, prairie falcon, and Coachella Valley round-tailed ground squirrel. Approximately 55 miles of the project alignment is within the BLM Chuckwalla DWMA and approximately 63 miles of the project alignment overlaps the USFWS Chuckwalla Critical Habitat Unit. Construction and operation of the project could result in direct impacts to NRHP-eligible sites.

It is estimated that the construction activities would last approximately 12 months. The total number of construction workers that would be employed by the project would range from 53 to 89, with an average of approximately 71 workers.

West-Wide Energy Corridors PEIS Proposed Section 368 Energy Corridors

In response to Section 368 of the Energy Policy Act of 2005, the BLM, DOE, and U.S. Forest Service have prepared a West-Wide Energy Corridor PEIS, which evaluated issues associated with designation of energy corridors on Federal lands in 11 western states including California, Nevada and Arizona. Section 368 energy corridors were designated in this document. As shown in the map titled "California Desert BLM District Offices, Renewable Energy Projects and Utility Corridors, Projects as of June 24, 2009", the PSPP is partially located within one of these corridors. It is anticipated that, upon finalization of the Section 368 project application process, various additional transmission projects could be developed near the Project site.

5.1.4 References

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http://www.energy.ca.gov/siting/solar/BLM_CEC_MOU.PDF

BLM/CEC Joint Processing Plan is available at
http://www.dmg.gov/documents/PLN_BLM_CEC_Combined_Prcssng_BLM_082007.pdf

CEC AFC requirements are available at <http://www.energy.ca.gov/2008publications/CEC-140-2008-003/CEC-140-2008-003.PDF>

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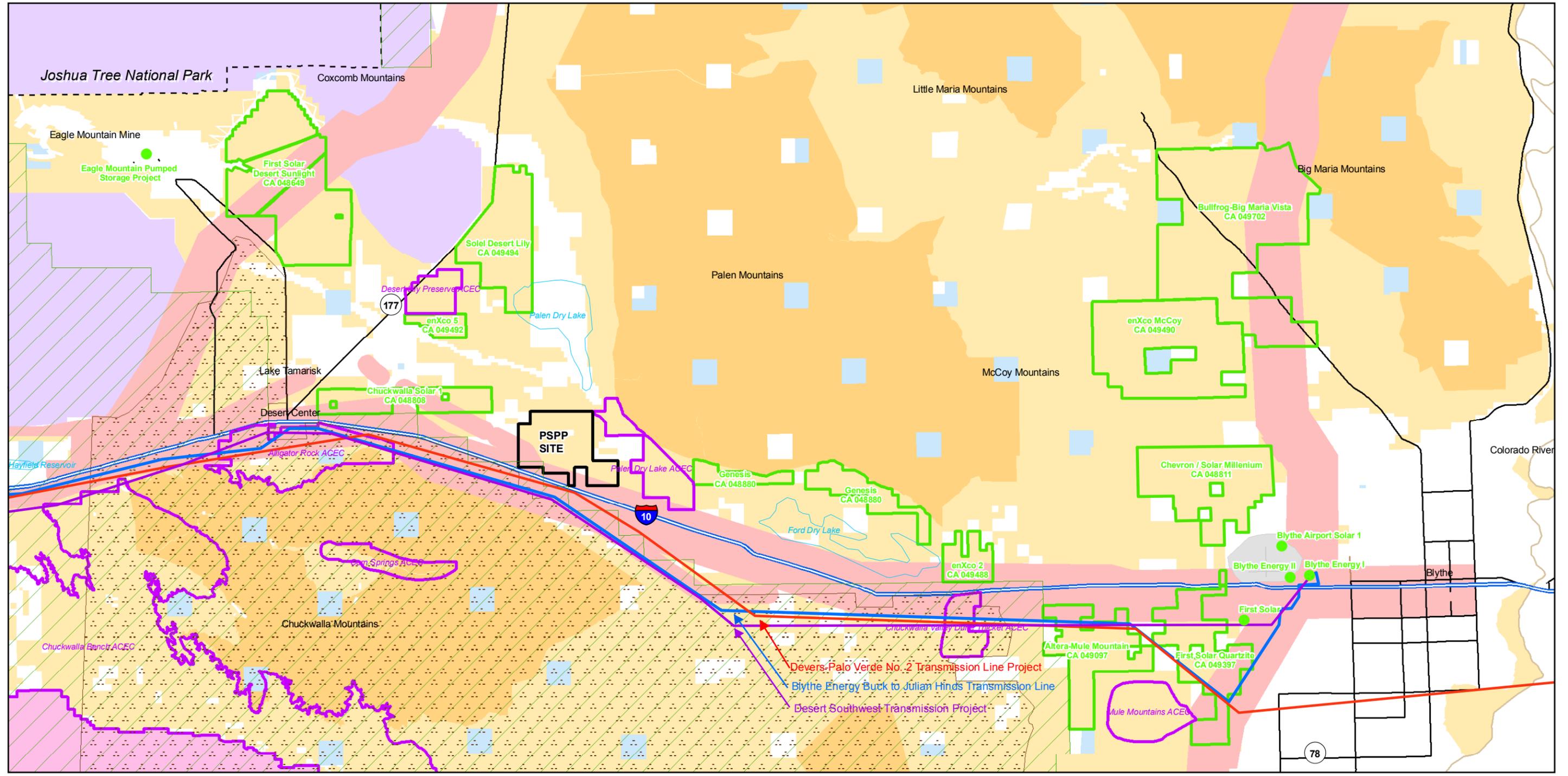
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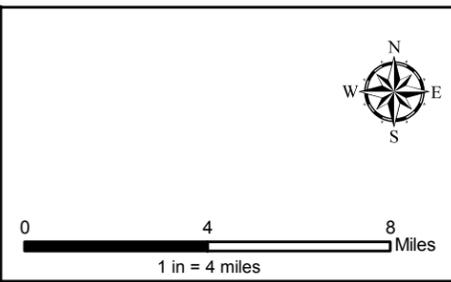


Legend	
	Proposed and Existing Solar and Wind Project Sites
	BLM Areas of Critical Environmental Concern (ACEC)
	Designated Utility Corridor
	BLM Wilderness Area
	Bureau of Land Management
	National Park Service
Note: Private land is shown as white space	
	Military
	State Lands
	PSPP Right-of-Way
	Desert Wildlife Management Area
	Desert Tortoise Critical Habitat

Data Sources:
 Renewable energy projects from Bureau of Land Management
 Renewable Energy Project Applications in California geodatabase

California Energy Commission at the following web address:
<http://www.energy.ca.gov/ret/steering/workgroups/environmental/maps/GIS/>
 Utility Corridors from BLM and Argonne National Laboratory
 ACEC from BLM
 National Parks from USGS

U.S. Fish and Wildlife Service; Critical Habitat Portal
<http://criticalhabitat.fws.gov/>



Palen Solar Power Project

Figure 5.1-1
PSPP Cumulative Projects

AECOM

Project: 12944-001
 Date: August 2009

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