

DOCKET	
09-AFC-6	
DATE	<u>JUL 15 2010</u>
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July 15, 2010

California Energy Commission
Dockets Unit
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: **PALO VERDE SOLAR I, LLC's PROPOSED PHASED CONSTRUCTION
AND MITIGATION
BLYTHE SOLAR POWER PROJECT
DOCKET NO. (09-AFC-6)**

Enclosed for filing with the California Energy Commission is the original of **PALO
VERDE SOLAR I, LLC's PROPOSED PHASED CONSTRUCTION AND MITIGATION**,
for the Blythe Solar Power Project (09-AFC-6).

Sincerely,



Marie Mills

Phased Construction and Mitigation
Blythe Solar Power Project

Submitted to California Energy Commission
Palo Verde Solar I, LLC
July 6, 2010

Description of Phased Construction and Mitigation

Palo Verde Solar I, LLC (PVSI), the Applicant, proposes that compensatory mitigation for the Blythe Solar Power Project (BSPP) be phased over the construction period of the project based on the area to be disturbed. Phasing will be defined in relation to a proposed disturbance area for the purpose of defining the limits of coverage and calculating the associated portion of the total compensatory mitigation obligation to be fulfilled prior to disturbance.

Once the details of the construction schedule for each phase of construction are finalized, PVSI will submit a construction phasing plan to the CPM for review and approval that will identify specific areas that will be disturbed for each phase of construction.

Below is a conceptual plan of how the phasing of construction and mitigation will occur. PVSI will submit the actual construction schedule for phased ground disturbance activities prior to each phase according to revised Condition Bio-12. PVSI will not disturb any area outside of the area that has been approved for that phase of construction and for the previously approved phases of construction.

PVSI envisions two overall phases of construction: Phase 1 for Unit 1 and Unit 2 and Phase 2 for Units 3 and 4. Within Phase 1, PVSI will start with Phase 1a, a limited area needed to start construction on critical items from Fall 2010 through the first half of 2011.¹ See table below and attached diagram for conceptual construction phasing plan.

Conceptual Construction Phasing Summary

Phase	Area of Site	Total Area (Acres)	Estimated Duration
Phase 1a	Black Rock Rd, Shared Facilities, Construction Power, Utilities Corridor, Water Well and initial portion of Unit 1	772.68 acres	7 months
Phase 1b	Remainder of Unit 1, Unit 2 and Gen-tie	3,024 acres	30 months
Phase 2	Unit 3, Unit 4, and Construction Area	3227.82 acres	32 months
TOTAL		7,024.5 acres	69 months

The attached diagram and drawing are conceptual presentations of the anticipated extent of the phases are not a final delineation of construction areas.

¹ The CEC has issued a scheduling order that forecasts a CEC Decision in September. The Applicant is expecting an ROD thereafter. Construction is expected to start in November 2010, after an anticipated October financial closing. If financial closing occurs earlier, ground disturbance, including clearance surveys, may begin as soon as October.

As detailed in the revised draft Biological Assessment submitted to BLM, Phase 1a has been defined to facilitate development in Fall of 2010 through the first half of 2011. Engineers and biologists coordinated to determine the level of construction that is critical in late 2010 and early 2011 and the location of that construction to avoid and minimize impacts to biological resources.

The first phase of the project (Phase 1a) will occur in areas that are considered biologically of very low risk to desert tortoise, characterized by inactive habitat with no detections of live desert tortoise and no recent sign (all sign is class 4 or 5). Phase 1a will consist of two types of construction areas: (1) linear facilities, including the access road and communication lines and (2) non-linear facilities to include a staging/laydown area and a portion of the Unit 1 solar block area. Note that all linears that consist of temporary impacts are considered under the first type of construction, regardless of location relative to the plant site because the impacts associated with those features are temporary in nature only. The total disturbance area proposed for Phase 1a non-linear features is less than 10 percent of the total project area for BSPP and constitutes those critical project areas that need to be constructed in 2010 and early 2011. A summary of the Phase 1a activities are provided in Appendix 1 for both linear and non-linear features.

The remaining phases of the projects will be identified as the projects progress, but will generally include development of common facilities first, followed by the remaining power block units. As schedule details are designed, Phase 1b may be further delineated into Phase 1b and Phase 1c. These phases would have a large enough area and length to promote efficient construction and ease of mitigation administration. For example, Phase 1b may be further divided into Phase 1b to finish Unit 1 and Phase 1c to start and finish Unit 2. Desert tortoise clearance surveys, including relocation/translocation, for all other project areas that consist of non-linear facilities will not occur outside the active season after Phase 1a of the project.

Proposed Modifications to Conditions of Certification

To implement, PVSII desires to submit a schedule for Phase 1a prior to start of ground disturbance activities to the CPM. This schedule will detail the boundaries of the Phase 1a as well as the number of acres to mitigate. Once the CPM approves, PVSII will either post security for mitigation, pay the in-lieu fee, pay other potential associated fees for mitigation, and/or provide mitigation lands. If PVSII posts security then, within 18 months, PVSII will provide the mitigation land commensurate with the disturbance area associated with each approved phase of construction.

To implement the phased mitigation approach, PVSII proposes the following additional language to Bio-12

The timing of the mitigation shall correspond with the timing of the site disturbance activities using the following method.

1. The project owner shall prepare and submit a construction phasing plan to the CPM for

review and approval that will identify specific areas that will be disturbed for each phase of construction.

2. Construction activities cannot occur until the CPM approves and authorizes construction for each phase identified in the construction phasing plan.

3. Within 18 months after construction activities commence for any phase identified in the construction phasing plan, the project owner shall provide the mitigation commensurate with the disturbance area associated with each approved phase of construction.

PVSI would be required to submit the schedule including boundaries and amount of acres to the CPM for its approval. PVSI would not be allowed to start construction activities until the CPM approval. In addition, PVSI would not be permitted outside the boundaries of the land approved by the CPM in the current or previously approved phases of construction. Within 18 months, PVSI would provide the mitigation land for that Phase.

For example, for Phase 1a, PVSI would submit the schedule to the CPM. In this case, PVSI would delineate the specific 773 acres that it wishes to disturb for construction. The CPM would approve Phase 1a. If PVSI does not participate in the in-lieu fee and delays the purchase of land (either for agency approval or other reason) for the entire amount of mitigation, PVSI would post security (e.g., letter of credit) for the remaining amount of mitigation. Within 18 months, PVSI would provide the agency-approved mitigation land.

Prior to the start of Phase 1b and other phases, PVSI would go through the same procedure.

Appendix 1: Excerpt of Revised Draft Biological Assessment Describing Forecasted Construction Activities During Phase 1a

Linear Features

Linear features can be cleared during any season after project approval for all sites. Linear features proposed as part of Phase 1a include the access road and the temporary construction power line, including the well area. Other linear features, including desert tortoise exclusionary fencing around plant site areas, may also be cleared and constructed during any season. A summary of these activities are provided below. Linear facilities constructed after Phase 1a will consist of similar construction activities as those defined for the Phase 1a components below.

Access Road

A section of Black Rock Road, the frontage road along I-10, will be paved from the Airport/Mesa Drive exit to the new turn-off for the plant access road. The new access road heading north from the Black Rock Road will be paved as well. The access road will also be used as a utility corridor for installation of telecommunication lines and a natural gas pipeline during this same timeframe. Access Road construction activities include, but may not be limited to the following activities:

- Fencing
- Clearing/grubbing
- Grading
- Survey
- Dust control
- Balancing dirt for road
- Excavating if required/installation of drainage/culverts
- Lay and compact road base
- Lay and roll asphalt
- Striping

Construction Power Line

A temporary construction 12.47 kV power line will be constructed from the Southern California Edison (SCE) distribution line through the well area to the future shared facilities area. Construction power line construction activities include, but may not be limited to the following activities:

- Fence/clear/grub
- Trench and lay conduit

- Pull wire
 - To the power block
 - To shared facilities
- Install transformers and pad

Well Area

The well is located along the future temporary construction line. A NEPA-compliant test well has been constructed pursuant to a Temporary Use Permit from BLM (DOI-BLM-CA-060-0010-0036-DNA), signed April 2, 2010 and issued to Solar Millennium May 5, 2010 (“Temporary Use Permit”). Initial access to the test well site is through Mesa Drive, an existing NECO Open Access road. Once the necessary construction authorizations have been issued, the test well will be uncapped and pumps will be installed to create a production well. To comply with various conditions of certification regarding dust suppression during construction and for construction of the desert tortoise fencing, Phase 1a activities will include installing water storage facilities around the well so that construction water trucks can access the well periodically and deliver water to Phase 1a construction locations. For the first weeks of construction, this area will also be used for storage until the shared facilities’ area is prepared.

The areas around the well will be surveyed for desert tortoises, temporary tortoise fencing will be installed, and the entire area will be cleared of any tortoises before water storage facility construction and clearing and grubbing commence. Prior to DT clearance surveys and fencing, all of the activities surrounding the water well will occur within the area that BLM reviewed in granting its Temporary Use Permit.

Well construction activities include, but may not be limited to the following activities:

- Installation of pumps
- Fence/clear/grub
- Grade, install rock base if required to prepare equipment turn around area
- Install well equipment, pump, totalizing meter
- Locate water tanks/ baker tanks
- Prepare laydown areas
- Storage of fencing material, miscellaneous material

Non-Linear Features

Phase 1a non-linear area will include an area around shared facilities and, during the later period, a portion of Unit 1 solar field. These areas are located in predominantly low-quality habitat and are considered unoccupied with a very low potential for finding desert tortoise.

Since construction activities are planned to start in November, 2010², the clearance surveys for the non-linear areas would occur outside of the active season. However, clearance surveys will be conducted in accordance with standard clearance protocol methodologies. In the unlikely event that a desert tortoise is detected during clearance surveys conducted outside the active season (Phase 1a), a 1-hectare buffer will be established around the tortoise and monitoring will be implemented until the active season when the desert tortoise can be safely relocated/translocated. The details on this method will be presented in the relocation/translocation plan.

Shared Facilities Area

The shared facilities area will be grubbed and graded. This area will be the main lay-down area to prepare the site for construction and will also be the staging area for parking and work trailers. Construction of the concrete batch plant and fueling depot will also be in the Shared Facilities area. Construction of the Assembly Hall is expected to begin in later part of Phase 1a with the laying of its foundation. Shared facilities construction activities will include, but may not be limited to the following:

- Fence, clear, grub
- Assembly hall foundation
- Install batch plant
- Installation production well
- Install construction offices/trailers
- Storage/laydown
- Construction of warehouse space
- Survey shared facilities

Portion of Unit 1

In the later period, a portion of the Unit 1 area will be grubbed and graded. The area will be cleared for a portion of the solar field and the power block. Some geotechnical borings will be drilled. Depending on water supply, two additional wells would likely be installed by the power block during Phase 1a. Facilities development will begin, including forming the Power block's foundation. A portion of the planned rerouted drainages will be constructed through excavation and grading at the northeast corner (part of the "T" shape) to keep water off site. The rerouted wash portion will follow agreed upon design features (e.g., 3:1 slopes). In addition, desert tortoise exclusionary fencing will be installed to minimize access to the washes and potential trapping of desert tortoises. The design and construction of this portion of the northern wash will be included in the Storm Water Pollution Prevention Plan (SWPPP). Phase

² The CEC has issued a scheduling order that forecasts a CEC Decision in September. The Applicant is expecting an ROD shortly thereafter. Construction is expected to start after financial closing. If financial closing occurs earlier, clearance surveys may begin as soon as October.

1a solar field construction activities will include, but may not be limited to, the following activities:

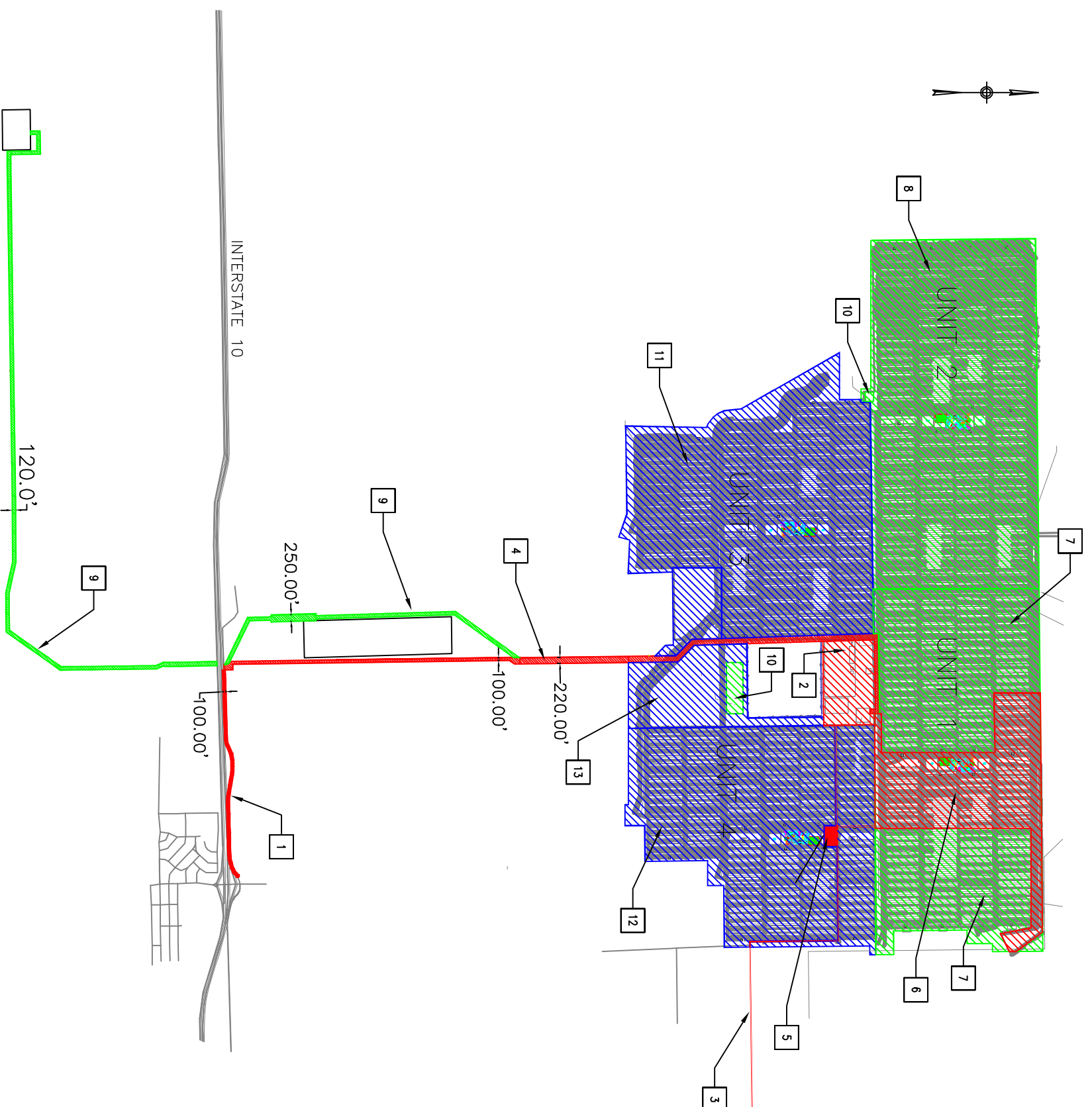
- Fence, clear, grub
- Grading
- Survey/solar field layout
- Caission installation, drilling and pouring
- Installation of a production well
- Power block foundations
- Power block undergrounds – wiring and piping
- BOP buildings – water treatment building, field erected tanks,
- Receive/begin install on pipe rack/structural steel
- Receive heavy haul/oversized loads
- Begin ACC installation

Phase 1a construction equipment for all components will include the use of multiple vehicles and pieces of heavy equipment including:

- Trencher/ditch witch
- Scrapers
- Excavators
- Graders
- Front end loaders
- Water trucks / water buffalo
- Pick ups
- Rollers
- Sheeps foot
- Dump trucks
- Concrete trucks
- Forklifts (Shared Facilities Construction)
- Tower crane or Friction Rig Crane (Solar Field Construction)
- Manlift (Solar Field Construction)
- Boom trucks (Solar Field Construction)
- Welding rigs (Solar Field Construction)
- Forklifts (Solar Field Construction)

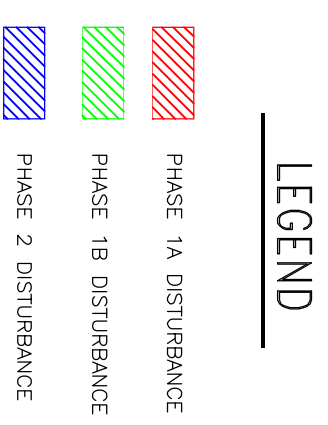
The Phase 1a non-linear construction sequence will need to occur outside of the USFWS defined active season for desert tortoise (late March through May; September through October) to meet the required construction timelines. For Phase 1a non-linear areas, Solar Millennium requests deviations from the limitations on desert tortoise clearance surveys in non-linear areas as defined by the USFWS. Phase 1a non-linear areas have been defined to avoid and minimize impacts to the desert tortoise. Phase 1a construction activities are planned and timed so that the critical nodes for the construction of the site are completed first. Construction will begin in November,

one month after the active season. To continue future construction activities, water must be accessed and the access road must be completed. The construction power line must be constructed to provide power to the site. The shared facilities area must be cleared for lay-down of equipment and materials and construction of the assembly hall for the solar facilities.



PLAN VIEW

SCALE: NTS



LEGEND

ITEM	DESCRIPTION	AREA (ACRES)	DURATION (MONTHS)
DISTURBED AREA PHASE 1A			
1	BLACK ROCK ROAD	17.3	
2	SHARED FACILITIES	123	
3	CONSTRUCTION POWER	11.7	
4	UTILITIES CORRIDOR	102.4	APPROXIMATELY 7 MONTHS
5	WATER WELL	3.28	
6	UNIT 1	515	
SUB TOTAL		772.68 ACRES	
DISTURBED AREA PHASE 1B			
7	REMAINDER OF U. 1	1185	
8	UNIT 2	1708	
9	GEN-TIE	115	APPROXIMATELY 30 MONTHS
10	LAND TREATMENT UNIT	16	
SUB TOTAL		3024 ACRES	
DISTURBED AREA PHASE 2			
11	UNIT 3	1495	
12	UNIT 4	1342.14	APPROXIMATELY 32 MONTHS
13	CONSTRUCTION AREA	390.68	
SUB TOTAL		3227.82 ACRES	
TOTAL		7024.5 ACRES	

NO.	DATE	REVISION	BY	APP.	APP. DATE	NOTES	DESCRIPTION	COST ACCOUNT	CONSTRUCTION APPROVAL	APPROVAL	DATE	SCALE AS SHOWN	PROFESSIONAL SEAL	JOB NO.	DWG NO.	BSPP-200-201	REVISION	
1	06/17																	
2	06/19	DISTURBANCE SKETCH (1814 ACRES)																
3	06/20	REDUCED TOTAL DISTURBED AREA (910 ACRES)																
4	07/02	ADDED PHASE 1B AND 2 REVISED AREAS									07/02/10							
INFORMATION CONTAINED: ALL PHASE DISTURBANCE DESCRIPTIONS, DISTURBANCE AREAS, AND/OR INFORMATION EMPLOYED HEREIN ARE AND SHALL REMAIN THE PROPERTY OF EARTH TECH AND SHALL BE FIELD CONFIDENTIAL, AND SHALL NOT BE USED FOR ANY PURPOSE NOT PROVIDED FOR IN AGREEMENTS WITH EARTH TECH.										AECOM 2101 WEBSTER STREET SUITE 1000 OAKLAND, CALIFORNIA 94612		Solar Millennium LLC		AECOM R-4				



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
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**APPLICATION FOR CERTIFICATION
FOR THE *BLYTHE SOLAR
POWER PLANT PROJECT***

Docket No. 09-AFC-6

PROOF OF SERVICE
(Revised 5/3/10)

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DECLARATION OF SERVICE

I, Marie Mills, declare that on July 15, 2010, I served and filed copies of the attached **PALO VERDE SOLAR I, LLC's PROPOSED PHASED CONSTRUCTION AND MITIGATION**, dated July 6, 2010. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:
[\[http://www.energy.ca.gov/sitingcases/solar_millennium_blythe\]](http://www.energy.ca.gov/sitingcases/solar_millennium_blythe)

The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

sent electronically to all email addresses on the Proof of Service list;

by personal delivery or by depositing in the United States mail at with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (**preferred method**);

OR

depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 09-AFC-6
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.



Marie Mills