

DOCKET 09-AFC-8

DATE MAY 21 2010

RECD. MAY 21 2010

May 21, 2010

California Energy Commission Docket No. 09-AFC-8 1516 9th St. Sacramento, CA 95814

Genesis Solar Energy Project - Docket Number 09-AFC-8

Docket Clerk:

Enclosed for filing with this letter is one hard copy and one electronic copy of our *Minor Changes to the Genesis Solar Energy Project Description.*

The document addresses the following three minor changes:

- 6-pole Extension of Transmission Line
- Inclusion of Distribution and Telecommunications Line
- Removal of "Toe" Area from the Plant Facility

Sincerely,

Tricia Bernhardt

Project Manager/Tetra Tech EC

rice Borhandt

cc: Mike Monasmith /CEC Project Manager





BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA 1516 NINTH STREET, SACRAMENTO, CA 95814 1-800-822-6228 – www.energy.ca.gov

APPLICATION FOR CERTIFICATION FOR THE GENESIS SOLAR ENERGY PROJECT

Docket No. 09-AFC-8

PROOF OF SERVICE (Revised 5/12/10)

APPLICANT

Ryan O'Keefe, Vice President Genesis Solar LLC 700 Universe Boulevard Juno Beach, Florida 33408 E-mail service preferred Ryan.okeefe@nexteraenergy.com

Scott Busa/Project Director Meg Russel/Project Manager Duane McCloud/Lead Engineer NextEra Energy 700 Universe Boulvard Juno Beach, FL 33408 Scott.Busa@nexteraenergy.com Meg.Russell@nexteraenergy.com Duane.mccloud@nexteraenergy.com E-mail service preferred Matt Handel/Vice President Matt.Handel@nexteraenergy.com Email service preferred Kenny Stein, **Environmental Services Manager** Kenneth.Stein@nexteraenergy.com

Mike Pappalardo
Permitting Manager
3368 Videra Drive
Eugene, OR 97405
mike.pappalardo@nexteraenergy.com

Kerry Hattevik/Director West Region Regulatory Affairs 829 Arlington Boulevard El Cerrito, CA 94530 Kerry.Hattevik@nexteraenergy.com

APPLICANT'S CONSULTANTS

Tricia Bernhardt/Project Manager Tetra Tech, EC 143 Union Boulevard, Ste 1010 Lakewood, CO 80228 Tricia.bernhardt@tteci.com James Kimura, Project Engineer Worley Parsons 2330 East Bidwell Street, Ste.150 Folsom, CA 95630 James.Kimura@WorleyParsons.com

COUNSEL FOR APPLICANT

Scott Galati Galati & Blek, LLP 455 Capitol Mall, Ste. 350 Sacramento, CA 95814 sgalati@gb-llp.com

INTERESTED AGENCIES

California-ISO

e-recipient@caiso.com

Allison Shaffer, Project Manager Bureau of Land Management Palm Springs South Coast Field Office 1201 Bird Center Drive Palm Springs, CA 92262 Allison_Shaffer@blm.gov

INTERVENORS

California Unions for Reliable Energy (CURE)
c/o: Tanya A. Gulesserian,
Rachael E. Koss,
Marc D. Joseph
Adams Broadwell Joesph
& Cardoza
601 Gateway Boulevard,
Ste 1000
South San Francisco, CA 94080
tgulesserian@adamsbroadwell.com
rkoss@adamsbroadwell.com

*Tom Budlong 5439 Soquel Drive 3216 Mandeville Cyn Rd. Los Angeles, CA 90049-1016 tombudlong@roadrunner.com Californians for Renewable Energy, Inc. (CARE) Michael E. Boyd, President 5439 Soquel Drive Soquel, CA 95073-2659 michaelboyd@sbcglobal.net

OTHER

Alfredo Figueroa 424 North Carlton Blythe, CA 92225 lacunadeaztlan@aol.com

ENERGY COMMISSION

JAMES D. BOYD Commissioner and Presiding Member jboyd@energy.state.ca.us

ROBERT WEISENMILLER Commissioner and Associate Member rweisenm@energy.state.ca.us

Kenneth Celli Hearing Officer kcelli@energy.state.ca.us

Mike Monasmith
Siting Project Manager
mmonasmi@energy.state.ca.us

Caryn Holmes
Staff Counsel
cholmes@energy.state.ca.us

Robin Mayer Staff Counsel rmayer@energy.state.ca.us

Jennifer Jennings
Public Adviser's Office
publicadviser@energy.state.ca.us

I, Tricia Bernhardt, declare that on May 21, 2010, I served and filed copies of the *Minor Changes to the Genesis Solar Energy Project* dated May 21, 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/genesis_solar].

The documents have 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:
Х	sent electronically to all email addresses on the Proof of Service list;
Х	by personal delivery or by depositing in the United States mail at Sacramento, California 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:
Х	sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (<i>preferred method</i>);
OR	
	depositing in the mail an original and 12 paper copies, as follows:
	CALIFORNIA ENERGY COMMISSIONI

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. <u>09-AFC-8</u> 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512 <u>docket@energy.state.ca.us</u>

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

Original Signed By:

Tricia Bernhardt

Minor Changes to the Genesis Solar Energy Project Description

6-pole Extension of Transmission Line Inclusion of Distribution and Telecommunications Line Removal of "Toe" Area from Plant Facility

Submitted by Genesis Solar, LLC Dated May 21, 2010

Introduction

This document is intended to describe three minor project changes to the Genesis Solar Energy Project (Genesis):

- a proposed six pole extension of the Genesis transmission line at the Colorado River Substation,
- the inclusion of an electrical distribution line and telecommunications line along the primary linear corridor to the Genesis plant facility, and
- the removal of the "toe" area from the plant facility.

1.0 Addition of Six Pole Transmission Line Extension at the Colorado River Substation

This document is intended to describe a proposed minor, six pole extension of the Genesis Solar Energy Project (Genesis) transmission line; biological and cultural resource surveys that were conducted in the area; and the potential temporary and permanent disturbance footprint.

The transmission line from the Genesis power plant site to the point of interconnect at Southern California Edison's (SCE's) future Colorado River Substation (CRS) is referred to as the project's generation or "gen-tie" transmission line and is part of the Genesis project description. SCE's CRS is *not* part of the Genesis project description, but rather is an SCE project that SCE would permit, construct, own and operate to serve several projects in the area. The CRS has been described in a separate document that was submitted for docketing to the California Energy Commission on May 19th, 2010 and will be addressed as a "reasonably foreseeable development scenario" in the NEPA and CEQA-equivalent documents being prepared by the Bureau of Land Management (BLM) and the California Energy Commission (CEC).

In Figure 1 (attached), the Genesis gen-tie is presented in one color (blue) and the CRS facilities are presented in another color (red) to visually depict where the Genesis gen-tie ends and where SCE's CRS begins. As described in the CEC Application for Certification (AFC) and subsequent documents, the Genesis gentie would start at the Genesis power plant site and go approximately 7 miles to southeast until it reaches the existing Blythe Energy Transmission Line Project (BETP). From that point, the Genesis gen-tie would be strung eastward along existing BETP poles until the point where it leaves the BETP to enter into the CRS. Because the BETP runs immediately to the south of the proposed CRS location, Genesis had always assumed the gen-tie would go directly from the BETP poles into the south side of the CRS in a single span. However, SCE recently provided Genesis with a substation design that now requires the gen-tie, after it leaves the existing BETP poles, to come up around the western side of the substation and enter from the north (see Figure 2 attached). As shown in

Figure 2, this will require Genesis to add up to six additional gen-tie poles before entering the CRS.

1.1 Biological and Cultural Resource Surveys

Biological and cultural resource surveys of the area that could be potentially impacted by the six-pole extension of the gen-tie line were conducted in the spring of 2010 in conjunction with surveys that were being conducted for the CRS. Figure 2 shows the boundary of the biological resources survey area. The additional acreage is characterized as flat and exhibits general desert conditions.

The Blythe Solar Power Project (09-AFC-6) led the biological survey effort and on May 7th, 2010, Solar Millennium and their consultant AECOM released their preliminary spring 2010 survey results. On May 14th, they submitted a letter report to the CEC with the subject heading, "*Blythe Solar Power Project (09-AFC-6) - Preliminary Spring Survey Results Corrected and Preliminary Impact Calculations for Biological Resources*" (see Attachment A). Note that these biological survey reports covered a much larger area than just the sixpole extension area (i.e., they were intended to cover the large area of Solar Millennium's Blythe Solar Power Project). Of potential interest, the results on the maps show the presence of Mojave fringe-toed lizards and ribbed crypyantha.

Southern California Edison has stated that cultural resource surveys were also conducted of the area by their consultant. The results are expected to be issued in a May 25th, 2010 report.

1.2 Impacts

The addition of six additional poles will create minor temporary and permanent disturbance. During construction the following amount of ground disturbance is expected.

Temporary Disturbance	Dimensions (feet)	Quantity	Acres
Construction laydown and assembly area	100 x 200	1	0.46
Conductor Pulling Area	50 x 140	2	0.32
Pole pad construction area	50 x 50	6	0.34
Transmission Access road	50 x 3,700	1	4.24
Total Temporary Disturbance			4.58
Permanent Disturbance			
Transmission Pole Pads	6 x 6	6	.004
Transmission Maintenance	14 x 3700	1	1.18
Road			
Total Permanent Disturbance			1.19

1.3 Preliminary Conclusions

The permanent disturbance of 1.19 acres resulting from the maintenance road and the pole pads on approximately 45 acres of the expanded substation area is a minor impact to the environment. The temporary disturbance will constitute less than 5 acres. This disturbance may overlap in time and location with temporary disturbance from the transmission line construction of other projects, as well as the construction of the SCE substation.

Additional information is expected in the next few weeks regarding the surveys that were done by Solar Millennium and SCE. At that time, analysis will be conducted of the information that is available.

2.0 Inclusion of an Electrical Distribution/Telecommunications Line Along the Primary Linear Corridor at the Genesis Project Energy Site

The Genesis Solar Energy Project will need temporary power and communication during construction at the facility footprint. Although this need was inferred in the AFC, it was not identified as a separate feature. The project will need to tap into electrical power from an existing SCE distribution line near I-10.

This distribution/telecommunications line will follow the proposed Genesis linear corridor and access road up to the plant facility. This installation could either be above or below ground based on site conditions and availability of material. The type of material is likely to be single wood poles. Once the construction phase of the project is complete, these lines will likely be left in place to serve the onsite facilities such as offices, warehouse, and a control room. The development of the distribution line will follow the current SCE's standards, guidelines and procedures for installation of electrical distribution power lines.

The distribution/telecommunications line will be built within the disturbed linear corridor and will be adjacent to the final gen-tie line. Therefore, the creation of the distribution/telecommunications line will not create additional impacts other than the physical area needed for the permanent pole pads. This minor impact will be calculated and quantified in a subsequent document.

3.0 Removal of the "Toe" Area from the Plant Facility

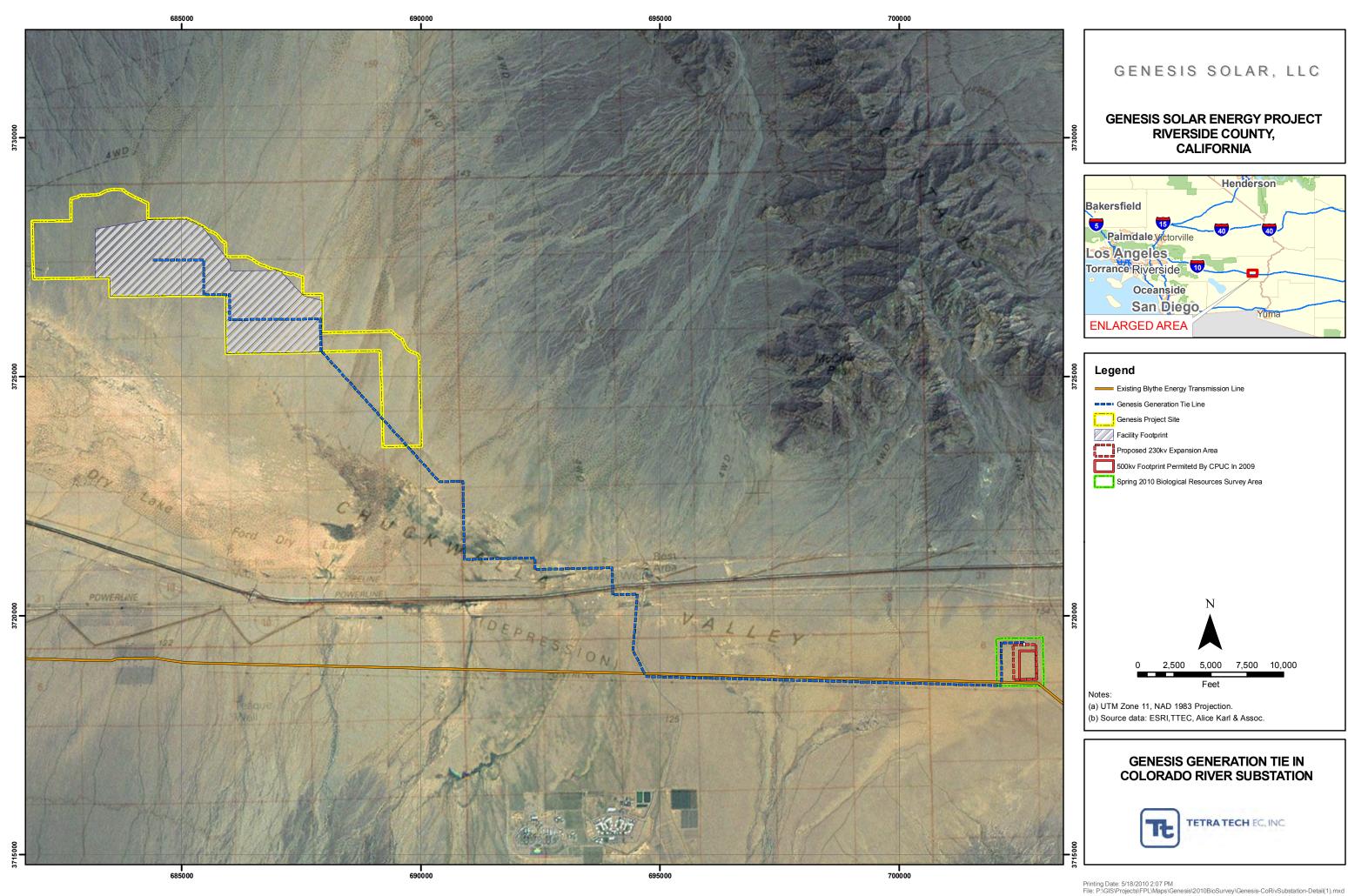
During a CEC workshop for the Genesis Solar Energy Project at the BLM office in Palm Springs, California on May 5th, 2010, the idea of not using the "toe" of the Genesis plant facility was discussed. (See Figure 3 attached) The proposal to remove the toe as as part of the active plant facility would minimize or negate some potential environmental impacts, primarily due to the presence of sand dunes and habitat for the Mojave fringe-toed lizard. Additionally, the toe area has several drainage washes running through it. Genesis Solar, LLC agreed to

remove the solar troughs and other plant facilities from the toe area, and to reconfigure the plant design to accommodate the change.

The toe removal reduces 41.4 acres of potential disturbance in sensitive habitat. Of that number, 27.2 acres are identified as sand dunes, with 14.2 acres as creosote bush scrub. The CEC, BLM and staff from U.S. Fish and Wildlife Service, and the California Department of Fish and Game consider this a positive project contribution to avoiding, reducing and minimizing impacts.

As described in Section 2 above, the disturbance area calculations for all three of these project changes in this document will be forthcoming in a subsequent report.

Figure 1

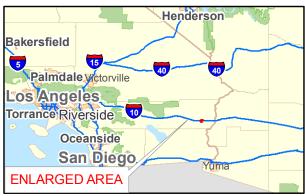


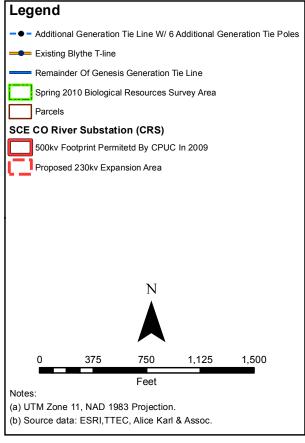




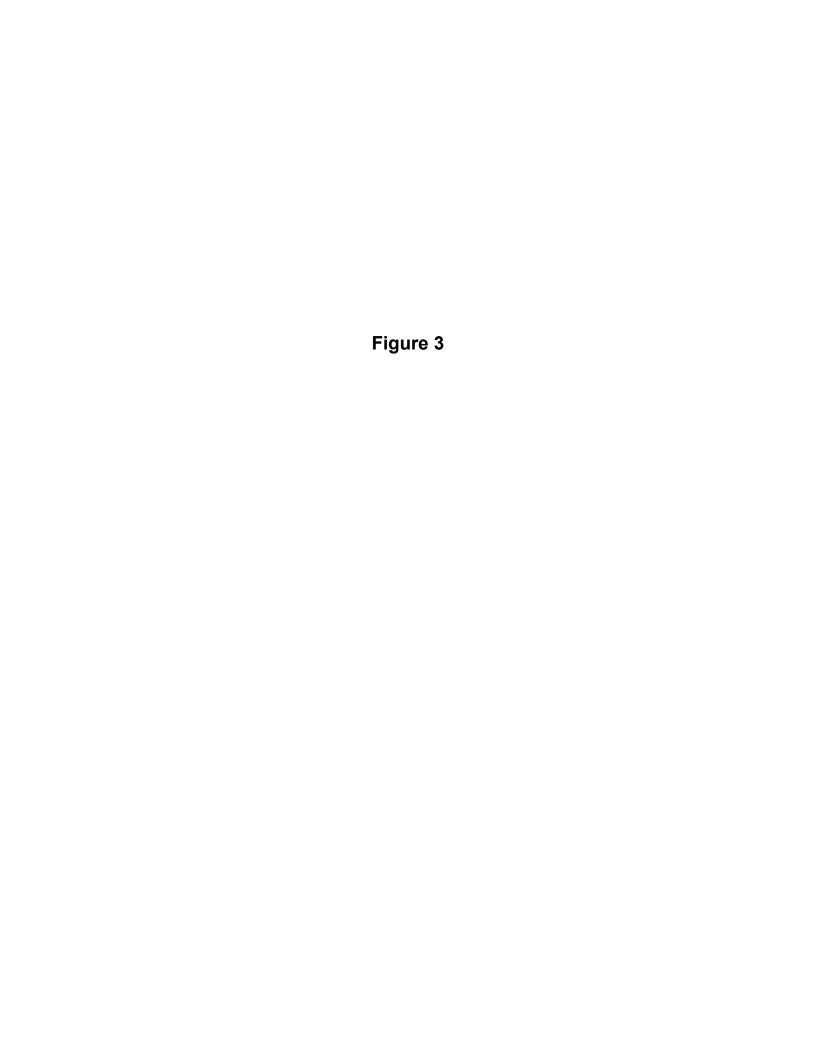
GENESIS SOLAR, LLC

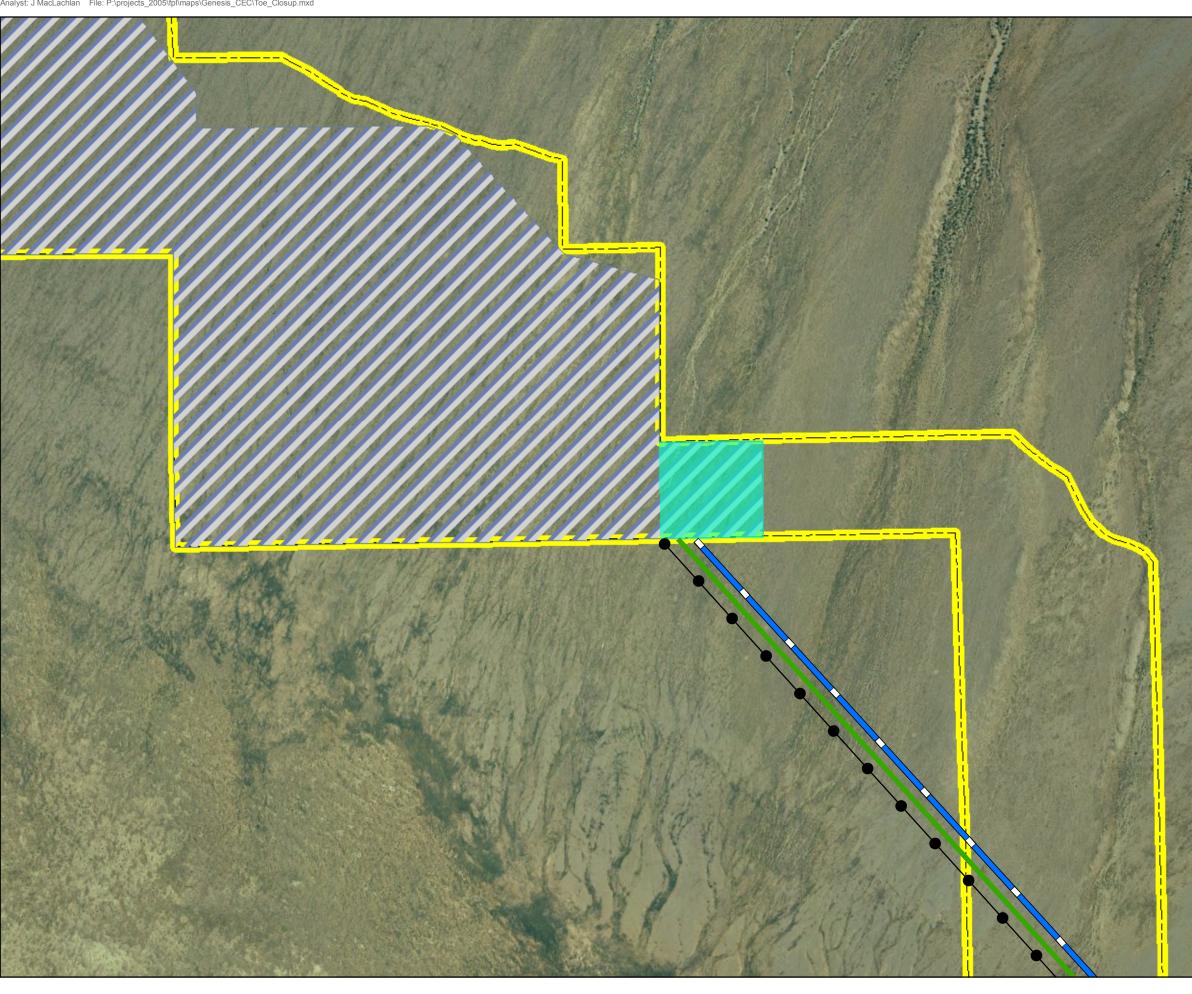
GENESIS SOLAR ENERGY PROJECT RIVERSIDE COUNTY, CALIFORNIA







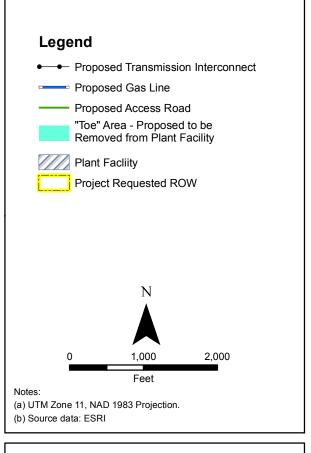




Genesis Solar, LLC

GENESIS SOLAR ENERGY PROJECT RIVERSIDE COUNTY, CALIFORNIA







Attachment A

AECOM Letter Report Dated May 14, 2010 (Reprinted with permission from Solar Millennium)

Subject: Blythe Solar Power Project (09-AFC-6) – Preliminary Spring 2010 Survey Results Corrected and Preliminary Impact Calculations for Biological Resources



AECOM 1420 Kettner Boulevard Suite 500 San Diego, CA 92101 www.aecom.com 619.233.1454 tel 619.233.0952 fax

May 14, 2010

Ms. Susan Sanders California Energy Commission 1516 Ninth Street Sacramento, California 95814

Subject: Blythe Solar Power Project (09-AFC-6) – Preliminary Spring 2010 Survey Results Corrected and Preliminary Impact Calculations for Biological Resources

Dear Ms. Sanders:

On behalf of Palo Verde Solar I, LLC, AECOM is submitting preliminary results of biological surveys conducted in spring 2010 for desert tortoise (*Gopherus agassizii*; DT), rare plants, jurisdictional waters, and incidental wildlife occurrences for the Blythe Solar Power Project. This information was requested at the Palen and Blythe Staff Workshops conducted on April 28 and 29, 2010. Additional information was also requested in a letter from Susan Sanders to Alan Solomon dated May 12, 2010.

Preliminary survey results for DT, rare plants and jurisdictional waters were submitted to the CEC on May 7, 2010. The results provided herein supersede the results provided on May 7, 2010. The previous survey results incorrectly included Coachalla Valley milk-vetch (*Astragalus lentiginosus var. coachellae*) as part of the rare plant botanical survey results. The proper identification of these occurrences is *Astragalus insularis* var. *harwoodii* (Harwood's milkvetch), a CNPS List 2.2 plant species. In addition, the results provided herein include an additional two mile segment of the gen-tie transmission line that was not previously reported. Surveys for jurisdictional waters have been completed and included herein for the additional transmission line; however, surveys for DT and rare plants are currently being conducted for this area. Therefore, the complete results of additional two mile segment of the transmission line will be provided in final technical reports to be submitted to the CEC in early June.

The preliminary survey results are presented in figures and tables attached. Table 1 and Figure 1 present a summary of observations of DT sign and DT occurrences noted during spring 2010 surveys. Table 2 and Figure 2 present the rare plant population counts observed during spring 2010 surveys. Figure 3 presents the results of a formal jurisdictional delineation of waters of the State. Table 3 and Figure 4 present incidental wildlife occurrences observed during protocol surveys for DT, rare plants, western burrowing owl, and jurisdictional waters. Results from the fall and spring 2009 surveys are not included in the tables and figures for DT, rare plants or incidental wildlife occurrences. However, the jurisdictional waters figure does include results from the 2009 surveys and a table presenting the results of both survey years is provided in the figure. Please note that the results provided in Tables 1 through 3 and Figures 1 through 4 are simply the results of our observations within the 100 percent coverage study area and associated buffers. These tables and figures do not represent total impacts within disturbance areas because we surveyed wider corridor widths and additional areas for contingency in the engineering design that ultimately will not be disturbed.

Figure 5 presents the additional disturbance areas for the temporary construction access road, transmission line corridor, utility corridor, road improvements to Black Rock Road, and additional project components that are outside the 2009 project footprint. Please note that some disturbance areas proposed in the 2009 project footprint have been removed in the 2010 project footprint. Therefore, the total Project Disturbance Area has been revised to be 6,983.9 acres. This total is still preliminary and subject to further refinement in the engineering design. A revised total disturbance area will be provided in final technical reports to be submitted to the CEC in early June.



Ms. Susan Sanders May 14, 2010 Page 2

Figure 6 presents preliminary impacts to all cover types, including state waters, resulting from the revised Project Disturbance Area. These impact calculations are still preliminary and subject to further refinement in the engineering design. Revised impact calculations will be provided in final technical reports to be submitted to the CEC in early June.

Please let us know if you have any questions.

naleau

Sincerely,

Mr. William Graham

Principal AECOM

Attachments: Table 1. Blythe Solar Power Project Desert Tortoise Observations Spring 2010

Table 2. Blythe Solar Power Project Rare Plant Populations Counts Spring 2010

Table 3. Blythe Solar Power Project Incidental Wildlife Occurrences Figure 1. Preliminary Results Desert Tortoise Spring 2010 Surveys Figure 2. Preliminary Results Botany Rare Plants Spring 2010 Surveys

Figure 3. Preliminary Results State Waters Spring 2010 Surveys

Figure 4. Preliminary Results Incidental Wildlife Occurrences Spring 2010 Surveys

Figure 5. Preliminary Disturbance Areas May 2010
Figure 6. Preliminary Impacts to Cover Types May 2010

CD. Raw Data Files in Excel and Shapefiles

cc: Alice Harron, Solar Millennium

Elizabeth Ingram, Solar Millennium Scott Galati, Solar Millennium Counsel

Mark Luttrell, AECOM

Blythe Preliminary Bio Survey Results Spring 2010 letter to CEC



Table 1. Blythe Solar Power Project Desert Tortoise Observations Spring 2010

Description	Proposed Project Study Area	Reconfigured Alternative Project Study Area	Proposed Project/Reconfigured Alternative Study Area ¹	Buffer	Incidental Observations Outside Buffer Area	Grand Total
Adult Tortoise		1		2		3
Adult Tortoise - Second Observation		1				1
Active Tortoise Burrow or Pallet - Class 1		3	1	22	4	30
Tortoise Burrow or Pallet - Class 2 (good condition, no evidence of recent use)	2	4		20	1	27
Tortoise Burrow or Pallet - Class 3 (deteriorated, definitely tortoise)		5		5	3	13
Possible Tortoise Burrow or Pallet (Class 4 or 5)		13		50	9	72
Tortoise Scat		2		2	1	5
Fossilized Turtle/Tortoise Bone		1		1		2
Tortoise Bone Fragment - Mineralized	10	10		6		26
Tortoise Bone Fragment - Not Mineralized	20	22	3	17	2	64
Tortoise Carcass (not disarticulated and scattered)	1	4		5		10
Tortoise Egg Shell Fragment		3				3
Tortoise Tracks	1	3	2	1		7
Tortoise Drinking Depression		1				1

¹This encompasses the areas where the Proposed Project Study Area and Reconfigured Alternative Study Area overlap.



Table 2. Blythe Solar Power Project Rare Plant Population Counts Spring 2010¹

Species	Proposed Project Study Area	Reconfigured Alternative Project Study Area	Propose Project/Reconfigured Alternative Study Area ²	Buffer	Incidental Observations Outside Buffer Area	Grand Total
Cottontop cactus	1		5	10		16
Harwood's milkvetch	677	60	128	1,837	60	2,762
Harwood's woollystar	2,134			1,287	8	3,429
Desert unicorn	4	15	6	1		26
Ribbed cryptantha	32,367			37,377	1,909	71,653 ³
Utah milkvine	14	78	12	526		630
Winged cryptantha				15		15

¹ Note that each point on the figure may represent multiple individuals

²This encompasses the areas where the Proposed Project Study Area and Reconfigured Alternative Study Area overlap.

³ Ribbed cryptantha was observed during 2010 botanical surveys as a generally continuous population throughout the stabilized and partially stabilized desert dunes south of I-10. This number represents the total number of plants physically counted during subsampling efforts; the actual population is currently estimated in the tens of millions (a more accurate population estimate will be provided in the Botanical Survey Report).



Table 3. Blythe Solar Power Project Incidental Wildlife Occurrences Spring 2010¹

Species Observations or Sign	Project Study Area	Reconfigured Alternative Study Area ²	Buffer	Grand Total
American Badger Den	2	6		8
American Badger Predation Burrow		1	1	2
Bat Guano - Unknown Species		1		1
Cooper's Hawk			1	1
Ferruginous Hawk			1	1
Kit Fox Burrow	6	6	2	14
Kit Fox Complex	5	10	7	22
Loggerhead Shrike	2	2	6	10
Loggerhead Shrike Nest			1	1
Mojave Fringe-toed Lizard	86		48	134
Nest Cavity - Unidentified Woodpecker Species			1	1
Northern Harrier	1	1	1	3
Potential Pond for Couch's Spadefoot	3	2	9	14
Swainson's Hawk	4		5	9
Unknown Raptor Nest			1	1
Western Burrowing Owl	1	1	1	3

¹ These observations were noted during protocol surveys conducted for desert tortoise, rare plants, western burrowing owl, jurisdictional waters and vegetation mapping.

²This encompasses the areas where the Proposed Project Study Area and Reconfigured Alternative Study Area overlap.

