

January 6, 2010

**DOCKET** 

08-AFC-13

DATE

JAN 06 2010

**RECD.** JAN 06 2010

Mr. Christopher Meyer **CEC Project Manager** Attn: Docket No. 08-AFC-13 California Energy Commission

1516 Ninth Street Sacramento, CA 95814-5512

Mr. Jim Stobaugh **BLM Project Manager** Attn: Docket No. 08-AFC-13 **Bureau of Land Management** P.O. Box 12000

RE:

SES Solar One Project

Applicant's Submittal of the Solar One Corridor Conflict Analysis

Dear Mr. Meyer and Mr. Stobaugh,

Tessera Solar hereby submits the Corridor Conflict Analysis and associated letter of approval from the BLM. I certify under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge.

Reno, NV 89520

Sincerely,

Felicia L. Bellows

Vice President of Development



## **United States Department of the Interior**

BUREAU OF LAND MANAGEMENT California Desert District 22835 Calle San Juan De Los Lagos Moreno Valley CA 92553-9046 www.ca.blm.gov



In Reply Refer To: 3031 (P) CACA-049537 CACA-049539 CAD000.06 DEC 16 2009

Camille Champion Project Manager, Stirling Energy Systems Tessera Solar 4800 N. Scottsdale Rd., Suite 5500 Scottsdale, AZ 85251

Dear Ms. Champion,

This letter is to confirm that the California Desert District Office (CDD), Bureau of Land Management (BLM) has received and reviewed your Corridor Conflict Analysis Letter for SES Solar One Project – CACA- 049537 and CACA-049539.

The report provided information on the potential impacts to the existing California Desert Conservation Area Plan designated energy Corridor G & H, and Corridor 27-41, designated in the Final Environmental Impact Statement for Designation of Energy Corridors on Bureau of Land Management Administered Lands in the 11 Western States. The information provided was sufficient enough for BLM to determine that the current proposed siting for the solar fields, power block, and other facilities within the SES Solar One Project would provide ample room to accommodate existing and future utility sitings through both designated corridors. Should you require changes to the footprint of the current SES Solar One Project siting proposal, a re-evaluation of the impacts to the corridors from the updated solar project siting would need to be done.

If you have any questions please call our Renewable Energy Program Manager, Greg Miller at (951) 697-5216.

Thank you,

Steven J. Borchard
District Manager

### **ENERGY CORRIDOR CONFLICT ANALYSIS**

### 1.1 PURPOSE

This report has been prepared at the request of the Bureau of Land Management (BLM) and provides supplemental information relevant to potential compatibility and conflict issues associated with the proposed use of the Solar One Project (Project) Right-of-Way (ROW) for requested lands. It presents the case for the compatibility of the proposed Project within the portions of the identified Energy Corridors

This report addresses the following:

- 1. Background information on the energy corridor issues for the Project site near the town of Newberry Springs, California.
- 2. Assessment of overlapping ROW requests on BLM administered land.
- 3. Recommendations for a workable solution to satisfy the needs of the energy project and the proposed energy corridor.

### 1.2 INTRODUCTION

The BLM has been involved both in the development of the Programmatic Environmental Impact Statement (PEIS) for the Section 368 Corridors (368) as well as the review and evaluation of specific, local ROW requests, including the Project request. The current site is close to a transmission corridor available for expansion to serve renewable energy projects, and the site has relatively low value as a biological or habitat resource. The intent of this report is to address the compatibility of the combined use of the energy transmission corridors for energy transmission while utilizing some area within the corridor for a solar energy project site.

In late 2005, a right-of-way (ROW) application request for 8,230 acres of federal land within San Bernardino County was filed with the Barstow Field Office for the Project by SES Solar Six, LLC and SES Solar Three, LLC (the Applicant) for the Solar One project. The Applicant is seeking approval to construct and operate the proposed SES Solar One (Solar One or Project) and its ancillary facilities. The main objective of this concentrating solar power Project is to provide clean, renewable, solar-powered electricity. Solar One is an electric generating facility with a nominal capacity of 850MW using concentrating solar power.

The overlap in ROW need reflects the purpose and compatibility of the Project which intends to create energy for sale and connect to the nearby electrical transmission infrastructure. The need for joint-use corridors includes transmission of electric power from new renewable energy generation projects to load centers. Both renewable energy generation projects and the transmission infrastructure to carry the electric power to load centers are critical to meeting current and future goals of generating more electric power from renewable sources. This transmission infrastructure is critical to achieving national renewable energy goals and to California's ability to meet the State's Renewable Portfolio Standards (RPS) which emphasizes the increased use of electrical energy from renewable sources. The Energy Policy Act of 2005 includes goals for renewable energy generation from public lands.

URS 1

In the attempt to resolve the issue of site viability, an evaluation was performed on the development requirements for multiple transmission uses within the site area. This Energy Corridor Conflict Analysis is intended to provide the BLM with the information needed to evaluate whether or not joint use of the energy transmission corridor for solar energy production and as a transmission corridor is possible. To accomplish this goal, research was conducted to identify existing and proposed land ownership/ROW issues.

### 1.3 EXISTING CONDITIONS

The Primary existing Corridors of concern (with their existing infrastructure) that are identified include the following:

- 1. BLM Energy Corridors G, H: Existing joint use planning corridors designed to meet projected utility needs as designated in the California Desert Conservation Act.
- 2. DOE 368 Corridor: Corridors proposed on Federal Lands within 11 Western States to promote renewable energy development in the West, which is currently constrained, in part, by a lack of transmission capacity.

Existing features within the Corridors include the following:

- 1. Electric Cable Transmission Lines
- 2. Natural Gas Pipelines
- 3. Utilities

Figure 1 identifies the Solar One ROW claims within the segment of the Combined Energy Corridors that includes the site. Records for the assessment were obtained from a BLM records search, which revealed the overlap in the combined energy corridors, ROWs, and the Project site. There are several different corridors that cross the site, including the G, the H and the 368. These corridors largely overlap each other, and for practical purposes are considered to represent one large area for the conveyance of energy and resources. In addition, the W corridor passes to the south of the aforementioned corridors, making the width of the area set aside for energy transmission in this location even greater.

To show the difference in land area allotted for transmission infrastructure with the Solar One Project in place, the properties were mapped using Geographic Information Systems (GIS). URS calculated the amount of overlapping acreage between corridors and the Project. The portion of the ROW request for Solar One overlaps an intersection of designated BLM Energy Corridors G, and H, as well as portions of the Section 368 Energy Corridors is shown in Figure 1. The overlap of pre-existing corridors is as follows: G and H corridor overlap is comprised of 3,471 acres; and, the overlap with the 368 Corridor is 2,385 acres (Please See Figure 1). However these totals are not additive because the 368 corridor overlaps with corridor G and H. The combined energy corridor overlap that is used for the purposes of this analysis is 3,471 acres, as shown in Table 1, below.

URS 2

| Area (acres) | Percent o |
|--------------|-----------|
|              |           |

| Development                        | Area (acres) | Percent of Pending Solar One |
|------------------------------------|--------------|------------------------------|
| Original Solar One ROW request     | 8,230        | 100%                         |
| Section 368 Corridor Overlap       | 2,385        | 29%                          |
| BLM designated Energy<br>Corridors | 3,471        | 42%                          |

Table 1 ROW Overlap

#### 1.4 CORRIDOR ANALYSIS

Based on the various potential competing uses for the area and the orientation of the Solar One site, and the remaining land area within the corridors was evaluated to determine if these two land uses could exist in the ROW while continuing to accommodate the long term energy transmission goals of the BLM and DOE. In order to visualize the assessment results provided in this analysis, an energy corridor map is included (Figure 1). Figure 2 establishes the relative decrease in transmission corridor width and shows the remaining width of the existing corridors which will be available for transmission infrastructure development with the Project in place.

The area currently occupied as ROW for the existing electrical energy transmission lines and Natural Gas lines is shown in Figure 1 within BLM designated Corridors G and H and the new 368 Corridor. The Solar One Project boundary is shown as oriented to the north of I-40. The proposed Project site is shown to encroach on the width of the combined Energy Corridors (G, H and 368) from about Hector Road to the Pisgah Substation, decreasing the overall area available for transmission linear development by 3,471 acres. The largest decrease in width due to the development of the project is on the G corridor and is 6,074 ft.

The potential corridor area for expected future transmission line development is shown within the linear boundaries of the existing corridors roughly between I-40 and the southern extreme of the G and H corridors. It includes an area south of the existing lines (South of I-40). This area represents the largest area for future transmission infrastructure development. The remaining combined corridor width to the south of the Project site ranges from 9415 to an approximate average of 5,000 ft, but at the narrowest is 4,291 feet (ft.). This includes some existing underground natural gas pipes and utilities as shown in Figure 2. However, the ROWs for these uses are would only reduce this width by 200 ft. at the narrowest point, leaving approximately 4,091 ft. for proposed and future transmission line development.

Because of the current overlap in BLM designated Corridors G and H, at minimum there is a remaining combined corridor width for the development of electrical load transmission in excess of 4,000 ft. with the Solar One Project in place. This space would potentially allow for the addition of up to 18-20 new high voltage transmission lines and associated structures assuming an individual ROW width of 200 ft. per transmission line. This leaves a combined energy corridor area with an average width of over 20 times that of the current transmission lines ROW within this area of the existing combined energy corridor.

Table 2 ROW Overlap and Width Comparison

| Approximate Useable Width of Existing     | Remaining Width at Narrowest Point of         |
|---|---|
| Combined Corridors (BLM Corridor G-H, and | Combined Corridors (BLM Corridor G-H, and     |
| 368 Corridor) at Narrowest Point          | 368 Corridor) with Area Removed for Solar One |
|   | Project                                       |
|   |   |
| 9,000 ft.                                 | 4,000 ft.                                     |
|   |   |

### 1.5 CONCLUSION

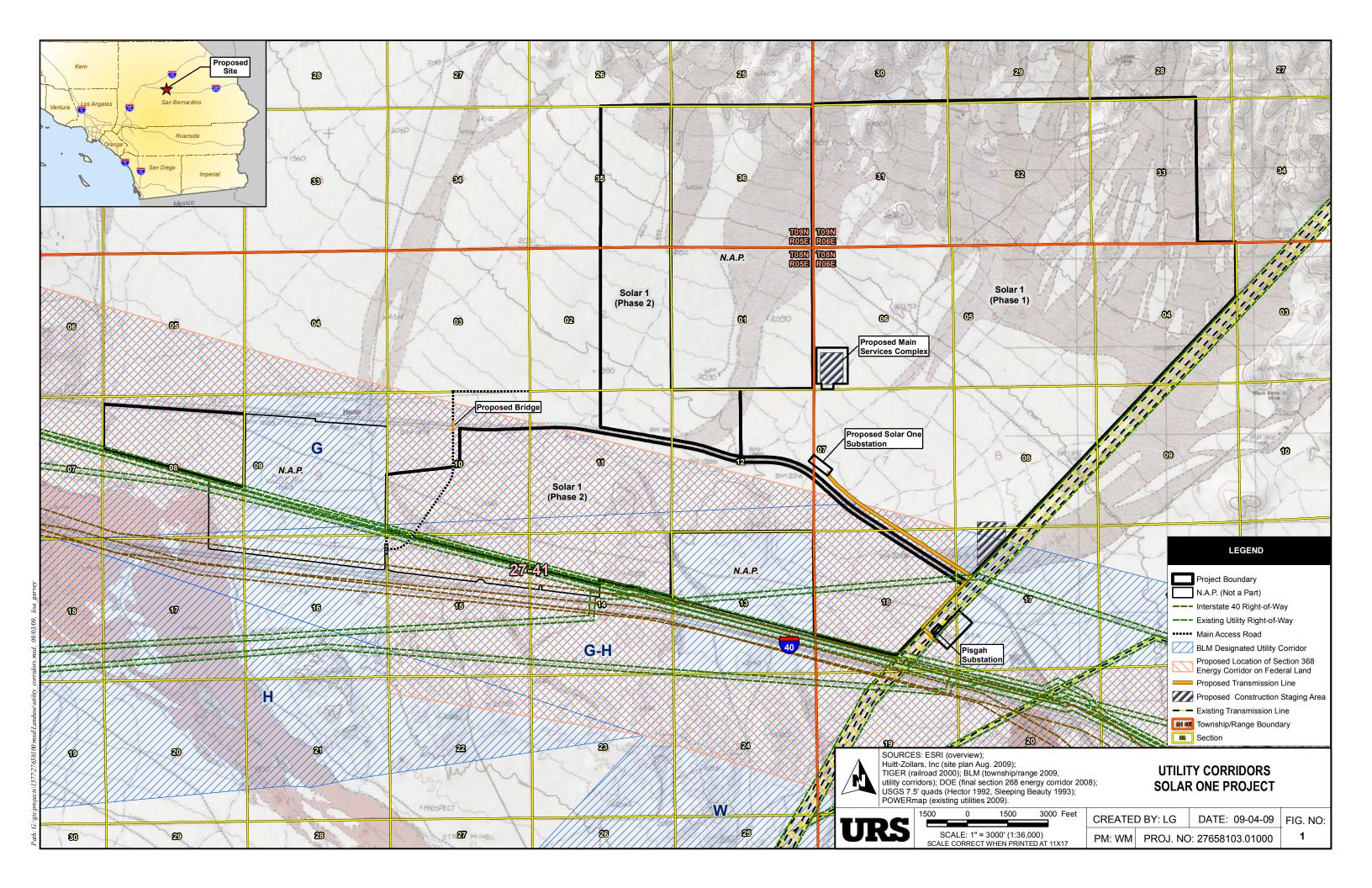
The southern portion of the existing corridors, with the Project in place, would provide capacity at a level that is adequate to meet the requirements for 18-20 additional transmission right of ways. It is anticipated that this will meet the demand for energy transmission over the long term. The area of the pending Project ROW also covered by the proposed Corridors ROW is 42%. The current space allotted for transmission within the combined energy corridors near the Project site ranges in width but is consistently over 2 miles. With the Solar One Project in place the space allotted for future transmission within the remaining area of the combined energy corridors ranges in width from over 4,000 ft. to more than 1 mile. This is an extremely generous and flexible corridor in which to locate future energy transmission lines and/or pipelines, and still accommodate the existing lines. It should be possible to accommodate existing lines, currently proposed, and some yet to be proposed lines within the Corridor area that would remain with the Project in place.

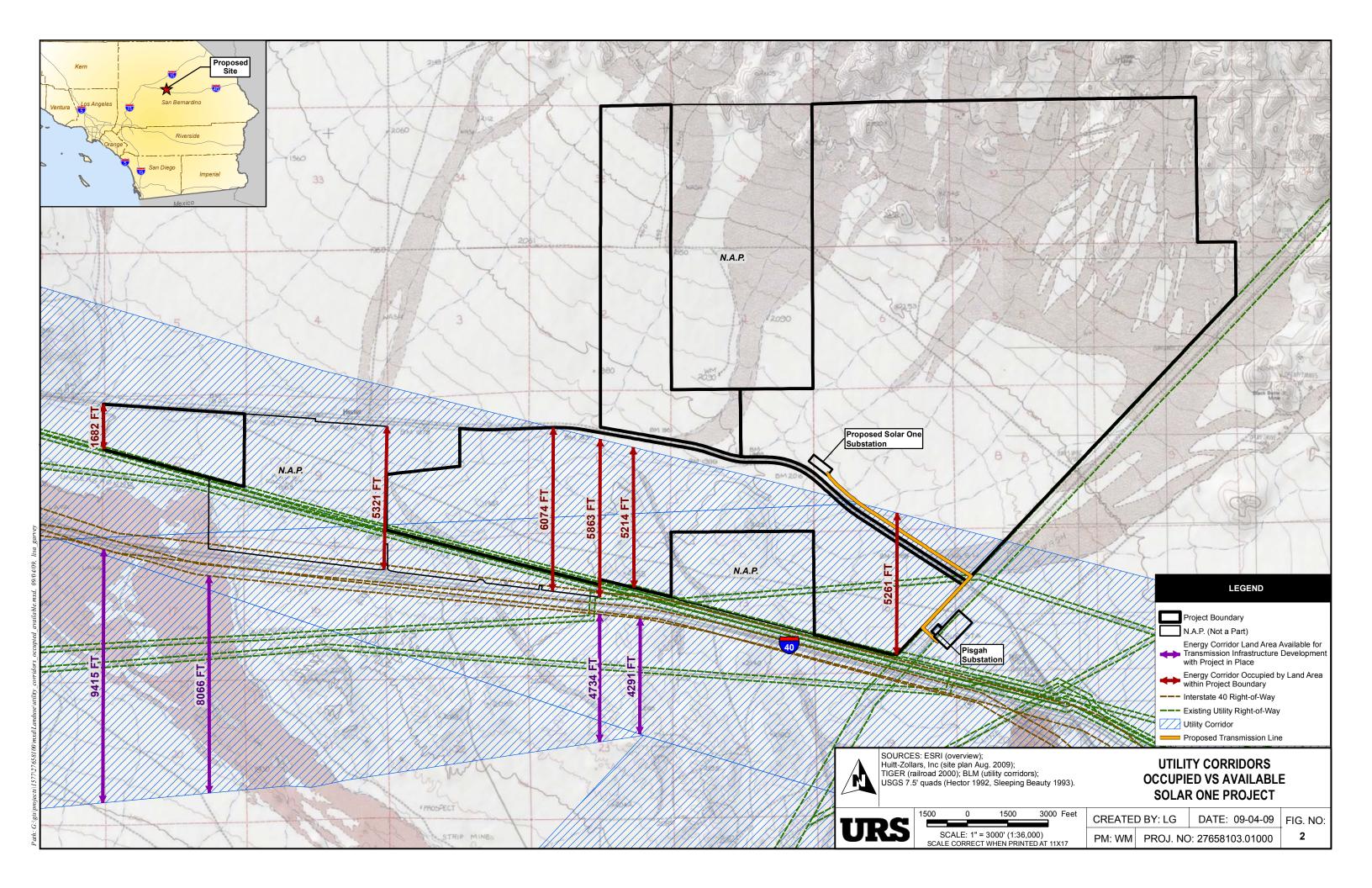
This report and supporting research data are provided to the BLM for their assessment of the potential conflict over the use of the G, H, and 368 transmission corridors. It is the determination of this report that the joint use of the combined energy corridors identified herein for the Solar One Project and transmission goals, leaves a considerable amount of remaining land area within the combined energy corridors to meet existing and future demand for transmission uses, while utilizing the land to the north of I-40 to produce renewable energy. A resolution in favor of joint use of this area is requested, in order to allow both the development of the Solar One Project and to provide for future growth in energy transmission through the existing corridor.

### 1.6 RECOMMENDATION

It is recommended that the area of the BLM Energy Corridors and the 368 Corridor best used for transmission with the Project in place would be located on the south side of I-40 as shown in Figure 2. This orientation would place the new corridor in alignment with the existing transmission lines and decrease conflicts between transmission and energy generation uses while providing adequate space for existing ROWs, and future transmission infrastructure development.

URS 4







# 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 SES SOLAR ONE PROJECT

Docket No. 08-AFC-13

#### PROOF OF SERVICE

(Revised 12/2/09)

### **APPLICANT**

Felicia Bellows, Vice President of Development Tessera Solar 4800 North Scottsdale Road, Ste. 5500 Scottsdale, AZ 85251 felicia.bellows@tesserasolar.com

Camille Champion
Project Manager
Tessera Solar
4800 North Scottsdale Road,
Suite 5500
Scottsdale, AZ 85251
camille.champion@tesserasolar.com

### **CONSULTANT**

\*Angela Leiba
AFC Project Manager
URS Corporation
1615 Murray Canyon Rd.,
Ste. 1000
San Diego, CA 92108
Angela Leiba@URSCorp.com

### **APPLICANT'S COUNSEL**

Allan J. Thompson Attorney at Law 21 C Orinda Way #314 Orinda, CA 94563 allanori@comcast.net

### **INTERESTED AGENCIES**

California ISO e-recipient@caiso.com

Jim Stobaugh
BLM – Nevada State Office
P.O. Box 12000
Reno, NV 89520
jim\_stobaugh@blm.gov

Rich Rotte, Project Manager Bureau of Land Management Barstow Field Office 2601 Barstow Road Barstow, CA 92311 Richard\_Rotte@blm.gov

Becky Jones California Department of Fish & Game 36431 41st Street East Palmdale, CA 93552 dfgpalm@adelphia.net

### **INTERVENORS**

California Unions for Reliable
Energy (CURE)
Loulena A. Miles,
Marc D. Joseph
Adams Broadwell Joseph &
Cardozo
601 Gateway Boulevard,
Ste. 1000
South San Francisco, CA 94080
Imiles@adamsbroadwell.com

Defenders of Wildlife
Joshua Basofin
1303 J Street, Suite 270
Sacramento, California 95814
e-mail service preferred
ibasofin@defenders.org

Basin and Range Watch Laura Cunningham Kevin Emmerich P.O. Box 70 Beatty, NV 89003 atomictoadranch@netzero.net

Patrick C. Jackson 600 N. Darwood Avenue San Dimas, CA 91773 e-mail service preferred ochsjack@earthlink.net

### **ENERGY COMMISSION**

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

JEFFREY D. BYRON Commissioner and Associate Member jbyron@energy.state.ca.us

Paul Kramer Hearing Officer pkramer@energy.state.ca.us

Caryn Holmes, Staff Counsel 1516 9th Street, MS-14 Sacramento, California 95814 cholmes@energy.state.ca.us

Christopher Meyer
Project Manager
cmeyer@energy.state.ca.us

Public Adviser publicadviser@energy.state.ca.us

### **DECLARATION OF SERVICE**

| I, <u>Corinne Lytle</u> , declare that on <u>January 6</u> , 2010, I served and filed copies of the attached <u>Applicant's Submittal of Energy Corridor Conflict Analysis. 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: <b>[www.energy.ca.gov/sitingcases/solarone]</b>.</u> |  |  |  |  |
|---|--|--|--|--|
| 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:   |  |  |  |  |
| X sent electronically to all email addresses on the Proof of Service list;  |  |  |  |  |
| X 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 <b>NOT</b> 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. <u>08-AFC-13</u> 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.  |  |  |  |  |
| Original Signed By  |  |  |  |  |
| Corinne Lytle   |  |  |  |  |