

**CH2M HILL** 

2485 Natomas Park Drive

Suite 600

Sacramento, CA 95833

Tel 916.286.0224

Fax 916.614.3424

October 2, 2012

427930.DI.DR

Mike Monasmith Senior Project Manager Systems Assessment & Facility Siting Division California Energy Commission 1516 Ninth Street, MS-15 Sacramento, CA 95814

Subject: Data Response, Set 2D-6

Hidden Hills Solar Electric Generating System (11-AFC-2)

Dear Mr. Monasmith:

On behalf of Hidden Hills Solar I, LLC; and Hidden Hills Solar II, LLC, please find attached an electronic copy of Data Response Set 2D-6, which responds to Staff's Data Request Set 2D filed on March 9, 2012.

Please call me if you have any questions.

Carrier

Sincerely, CH2M HILL

John L. Carrier, J.D. Program Manager

Encl.

c: POS List Project file **California Energy Commission** 

DOCKETED 11-AFC-2

TN # 67438

OCT 02 2012

# Hidden Hills Solar Electric Generating System (HHSEGS)

(11-AFC-2)

Data Response, Set 2D-6 (Response to Data Request 176)

Submitted to the

**California Energy Commission** 

Submitted by

Hidden Hills Solar I, LLC; and Hidden Hills Solar II, LLC

October 2, 2012

With Assistance from

CH2MHILL 2485 Natomas Park Drive Suite 600 Sacramento, CA 95833

## Contents

Section	Page
Introduction	1
Biological Resources (176)	2

### Introduction

Attached is the Hidden Hills Solar I, LLC, and Hidden Hills Solar II, LLC (collectively, "Applicant") response to the California Energy Commission (CEC) Staff's Data Request 176 for the Hidden Hills Solar Electric Generating System (HHSEGS) Project (11-AFC-2). The CEC Staff served this data request on March 9, 2012. Data Request 176 requests clarification on the identification of the previously identified *Mentzelia*, *Aliciella* and *Menodora* observed onsite during the 2011 spring surveys (CH2M HILL, 2011).

OCTOBER 2, 2012 1 INTRODUCTION

## **Biological Resources (176)**

#### **BACKGROUND - Off-site Surveys**

In the on-site survey report list of plants observed, staff noted three additional species that require further investigation or clarification: spiny menodora (*Menodora spinescens*); an unconfirmed blazing star (*Mentzelia* "cf." *albicaulis*); and an unidentified aliciella (*Aliciella* sp.), informally named "Marta Beckett's tutu". Because there are two rare *Aliciella* species and several rare *Mentzelia* species known from the project vicinity, staff is concerned that additional rare species may have been overlooked. In the case of the menodora, a new rare variety (*Menodora spinescens* var. *mohavensis*) was recently found in California and recently added to the Inventory of Rare and Endangered Species as a CNPS List 1B.2 species (CNPS 2012).

#### **DATA REQUEST**

176. Please also provide clarification on the identification of the previously unidentified *Mentzelia* and *Aliciella* and the variety of *Menodora* observed on-site. If identification cannot be confirmed, please revisit these occurrences in the field to identify the plants to species or to a level necessary to detect rare species, if present. If any of these previously unidentified plants are determined to be a rare California species, then please provide field survey information and maps for these additional species in the requested spring 2012 Botanical Survey Report.

**Response:** In DR 176, the CEC requested clarification on the likelihood of occurrence for three special-status plants. The Applicant has further researched this issue and, as presented below, concludes that: 1) the *Mentzelia* is not likely to be one of the special-status varieties; 2) the *Aliciella* is *Aliciella hutchinsifolia*, a common species; and 3) it is unlikely that the *Menodora spinescens* observed onsite is the special-status species *Menodora spinescens* var. *mohavensis*. Each is discussed below.

**Mentzelia.** As identified in Table B-1, in Attachment DR63-1A (2011 Site Botany Report) three special-status species in the genus *Mentzelia* are known from the general region surrounding the project site (CH2M HILL, 2011). These are *Mentzelia inyoensis*, *Mentzelia pterosperma* and *Mentzelia tricuspis*.

The *Mentzelia* cf. *albicaulis* observed onsite is a common species in the group of annual *Mentzelia* species. These have small yellow flowers that are open during the day and have long, narrow capsules. At the time of the spring surveys, the *Mentzelia* cf *albicaulis* observed onsite could not be identified with certainty because mature seeds are needed for positive identification of species in this group, and these were not present during the field survey period. However, for the following reasons, it is unlikely that the *Mentzelia* found onsite is one of the three potentially occurring special-status species.

The first of these three special-status species, *Mentzelia pterosperma*, was found less than one mile west of the site, during offsite surveys. This find was reported in Attachment DR63-2, Set 1B-3 (CH2M HILL, 2012a). Compared with the *Mentzelia* cf. *albicaulis* found onsite, *Mentzelia pterosperma* is a perennial with larger yellow flowers that are closed during the day, and it has much wider leaves and barrel-shaped capsules. The *Mentzelia* cf.

OCTOBER 2, 2012 2 BIOLOGICAL RESOURCES

albicaulis found onsite has smaller flowers and is an annual. A photo of *M. pterosperma* was submitted with the offsite botany survey report in Attachment DR63-2, Set 1B-3 (CH2M HILL, 2012a). *M. pterosperma* does not resemble *Mentzelia* species in the *M. albicaulis* group. Therefore, the unidentified *Mentzelia* could not have been *M. pterosperma*.

The second special-status *Mentzelia* with the potential to occur in the general region surrounding the project site is *Mentzelia polita*. It does not resemble *Mentzelia* species in the *M. albicaulis* group because it is a perennial, with larger yellow flowers and long narrow leaves (Jepson Interchange, 2012). The *Mentzelia* cf. *albicaulis* found onsite is an annual. *M. polita* occurs in white, gypsum-rich soils in Mojave desert scrub (CNPS, 2012; Jepson Interchange, 2012). In California, *M. polita* is restricted to the Clark Mountain Range. *M. polita* also occurs in southern Nevada. *M. polita* was found during surveys of the transmission line in Nevada, and a photograph of *M. polita* from the transmission line in the Spring Mountains was provided in the transmission line botanical survey report (CH2M HILL, 2012b) prepared for Valley Electric Association for use in the Environmental Impact Statement on the linear corridors. For the above reasons, the unidentified *Mentzelia* cf. *albicaulis* could not have been *Mentzelia polita*.

The third potentially occurring special-status *Mentzelia*, *Mentzelia tricuspis*, is different in appearance than the common *Mentzelia* cf. *albicaulis* because it has very large white flowers, wider leaves, a rounded habit, and barrel-shaped capsules. Most of the surveyors for this project are experienced with the identification of *Mentzelia tricuspis* as they saw this plant in flower on a survey for another project in Nevada in 2008. One individual of *M. tricuspis* was found in the McCullough Range during transmission line surveys. Photos of *M. tricuspis* can be accessed on the University of California website "CalPhotos" (Regents of the University of California, 2012). For the above reasons, the unidentified *Mentzelia* cf. *albicaulis* observed onsite could not have been *M. tricuspis*.

**Conclusion.** The unidentified *Mentzelia* cf. *albicaulis* observed during the onsite botany surveys is very unlikely to be any of the three potentially occurring special-status *Mentzelia* species (*Mentzelia inyoensis*, *Mentzelia pterosperma* and *Mentzelia tricuspis*).

Aliciella. Plants identified as *Aliciella* sp. in the species list in the onsite botany report (CH2M HILL, 2011, Attachment DR63-1A, Set 1B) are *Aliciella hutchinsifolia*, a common species<sup>1</sup>. The common *Aliciella hutchinsifolia* is in a group with small flowers with acute corolla lobes. The two special-status *Aliciella* species known from the general vicinity of the project site (*A. ripleyi* and *A. triodon*) are both included in a group that has "shoulders" on the corolla lobes, a feature that is easily visible. This character is important in distinguishing the common *Aliciella hutchinsifolia* from the two potentially occurring special-status *Aliciella* species. The surveyors were familiar with this genus and aware of this distinguishing character. None of the *Aliciella* individuals observed on the site had corolla lobes with "shoulders." A specimen in flower was collected and identification was confirmed subsequent to the surveys. This specimen is referenced in the Consortium of California Herbaria (Andrew Sanders, specimen #39197). *Aliciella hutchinsifolia* was also observed

-

<sup>&</sup>lt;sup>1</sup> The common name for *Aliciella hutchinsifolia* as reported in the offsite botany survey report (Attachment DR 63-2, Set 1B-3) (CH2M HILL, 2012a) is "Marta Beckett's tutu."

during the offsite surveys and was reported in the offsite botany survey report (Attachment DR63-2, Set 1B-3) (CH2M HILL, 2012a).

**Conclusion.** The unidentified *Aliciella* in the onsite botany report (CH2M HILL, 2011, Attachment DR63-1A, Set 1B) is *Aliciella hutchinsifolia*, a common species.

**Menodora.** Two varieties of *Menodora* are known to occur in California: *Menodora* spinescens var. spinescens and *Menodora spinescens* var. mohavensis. Menodora spinescens var. mohavensis is a special-status plant. Menodora spinescens var. spinescens is a common species. Corolla (flower) length is the distinguishing character between the two varieties of *Menodora spinescens*. Menodora spinescens var. mohavensis was added to the special-status plant list in August 2011, after the onsite botany surveys were completed.

Menodora spinescens was observed during the 2011 botanical surveys but it was very uncommon on the site. During the 2011 HHSEGS survey, no herbarium collections were made of *M. spinescens* onsite because at the time of the surveys, *Menodora spinescens* var. *mohavensis* was not considered to be special-status. One collection was made a few miles south of the site. This specimen is recorded in the Consortium of California Herbaria (Andrew Sanders #39374). This specimen was identified as *Menodora spinescens*, without indicating the variety. On April 5, 2012, Andrew Sanders checked the specimen (Sanders #39374) at the UCR herbarium, and determined that the corolla length is consistent with var. *spinescens*.

The Consortium of California Herbaria contains 81 records of *Menodora spinescens* from Inyo County. None of these have been identified or annotated as var. *mohavensis*. *Menodora spinescens* var. *mohavensis* has been documented in California through Consortium records only in the vicinity of Barstow, in San Bernardino County. Dr. Tim Chumley (an authority on *Menodora*, and author of the treatment in Jepson II) recently checked all the *Menodora* specimens in the UCR herbarium. Due to the timing of Dr. Chumley's review and the deposition of the herbarium specimen, Sanders #39374 was not checked by Dr. Chumley (Sanders, pers. comm.). But as noted above, Andrew Sanders checked this specimen on April 5, 2012. None of the 81 *Menodora spinescens* specimens in the Consortium of California Herbaria collected from Inyo County have the longer corolla length of *Menodora spinescens* var. *mohavensis*. It is therefore likely that the *Menodora spinescens* observed onsite is the common *Menodora spinescens* var. *spinescens*.

**Conclusion.** For the above reasons, it is unlikely that the *Menodora spinescens* observed onsite is *Menodora spinescens* var. *mohavensis*.

#### References:

California Native Plant Society (CNPS). 2012. Inventory of rare and endangered plants of California (online edition, version 8). Accessed at: <a href="http://www.cnps.web.aplus.net/cgibin/inv/inventory.cgi">http://www.cnps.web.aplus.net/cgibin/inv/inventory.cgi</a>

CH2M HILL. 2011. Attachment DR63-1A. Spring 2011 Botanical Resource Survey of the Hidden Hills Solar Electric Generating System Site. Prepared for Hidden Hills Solar I, LLC, and Hidden Hills Solar II, LLC. Data collected by GANDA. Filed as Data Response Set 1B. Available at: <a href="http://www.energy.ca.gov/sitingcases/hiddenhills/index.html">http://www.energy.ca.gov/sitingcases/hiddenhills/index.html</a>

CH2M HILL. 2012a. Attachment DR63-2. *Technical Report: Spring 2011 Offsite Surveys for Special-Status Plants for the Hidden Hills Solar Electric Generating System*. Prepared for Hidden Hills Solar I, LLC, and Hidden Hills Solar II, LLC. January. Prepared by CH2M HILL. Data collected by GANDA. Filed as Data Response Set 1B-3. Available at: http://www.energy.ca.gov/sitingcases/hiddenhills/index.html

CH2M HILL. 2012b. Technical Report: Spring 2011 Botany Surveys of the Valley Electric Association 500 kV Transmission Line and Ancillary System Facilities Project. Prepared for Valley Electric Association. April. Prepared by CH2M HILL. Data collected by GANDA.

Jepson Online Interchange. 2012. Consortium of California Herbaria on-line database. Accessed at: http://ucjeps.berkeley.edu/interchange.html

Regents of the University of California, Berkeley. 2012. "Calphotos" Website. Available online at: <a href="http://calphotos.berkeley.edu/flora/">http://calphotos.berkeley.edu/flora/</a>

Sanders, Andrew. 2012. Herbarium Director, University of California Riverside. Personal communication with Amy Hiss regarding *Menodora*. September 2012.



## 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 HIDDEN HILLS SOLAR ELECTRIC GENERATING SYSTEM

Docket No. 11-AFC-02

PROOF OF SERVICE (Revised 9/20/12)

#### **APPLICANT**

BrightSource Energy Stephen Wiley 1999 Harrison Street, Suite 2150 Oakland, CA 94612-3500 swiley@brightsourceenergy.com

BrightSource Energy
Bradley Brownlow
Michelle L. Farley
1999 Harrison Street, Suite 2150
Oakland, CA 94612-3500
bbrownlow@brightsourceenergy.com
mfarley@brightsourceenergy.com

BrightSource Energy Clay Jensen Gary Kazio 410 South Rampart Blvd., Suite 390 Las Vegas, NV 89145 cjensen@brightsourceenergy.com gkazio@brightsourceenergy.com

#### APPLICANTS' CONSULTANTS

Strachan Consulting, LLC Susan Strachan P.O. Box 1049 Davis, CA 95617 susan@strachanconsult.com

CH2MHill John Carrier 2485 Natomas Park Drive, Suite 600 Sacramento, CA 95833-2987 jcarrier@ch2m.com

#### **COUNSEL FOR APPLICANT**

Ellison, Schneider and Harris, LLP
Chris Ellison
Jeff Harris
Samantha Pottenger
2600 Capitol Avenue, Suite 400
Sacramento, CA 95816-5905
<a href="mailto:cte@eslawfirm.com">cte@eslawfirm.com</a>
<a href="mailto:jdh@eslawfirm.com">jdh@eslawfirm.com</a>
<a href="mailto:sgp@eslawfirm.com">sgp@eslawfirm.com</a>

#### INTERVENORS

Jon William Zellhoefer P.O. Box 34 Tecopa, CA 92389 jon@zellhoefer.info

Center for Biological Diversity Lisa T. Belenky, Sr. Attorney 351 California Street, Suite 600 San Francisco, CA 94104 lbelenky@biologicaldiversity.org

Center for Biological Diversity Ileene Anderson, Public Lands Desert Director PMB 447 8033 Sunset Boulevard Los Angeles, CA 90046 ianderson@biologicaldiversity.org

Old Spanish Trail Association Jack Prichett 857 Nowita Place Venice, CA 90291 jackprichett@ca.rr.com

#### INTERVENORS (con't.)

Cindy R. MacDonald 3605 Silver Sand Court N. Las Vegas, NV 89032 sacredintent@centurylink.net

Richard Arnold P.O. Box 3411 Pahrump, NV 89041 warnold@hotmail.com

#### INTERESTED AGENCIES

California ISO e-recipient@caiso.com

Great Basin Unified APCD
Duane Ono
Deputy Air Pollution Control Officer
157 Short Street
Bishop, CA 93514
dono@gbuapcd.org

County of Inyo
Dana Crom
Deputy County Counsel
P.O. Box M
Independence, CA 93526
dcrom@inyocounty.us

Nye County Lorinda A. Wichman, Chairman Board of County Supervisors P.O. Box 153 Tonopah, NV 89049 lawichman@gmail.com

#### INTERESTED AGENCIES (con't.)

Nye County Water District L. Darrel Lacy Interim General Manager 2101 E. Calvada Boulevard Suite 100 Pahrump, NV 89048 <u>llacy@co.nye.nv.us</u>

National Park Service
Michael L. Elliott
Cultural Resources Specialist
National Trails Intermountain
Region
P.O. Box 728
Santa Fe, NM 87504-0728
Michael\_Elliott@nps.gov

\*Southern Inyo Fire Protection District Larry Levy, Fire Chief P.O. Box 51 Tecopa, CA 92389 sifpd@yahoo.com

#### <u>ENERGY COMMISSION -</u> <u>DECISIONMAKERS</u>

KAREN DOUGLAS

Commissioner and Presiding Member karen.douglas@energy.ca.gov

CARLA PETERMAN
Commissioner and Associate Member
carla.peterman@energy.ca.gov

Ken Celli Hearing Adviser ken.celli@energy.ca.gov

Eileen Allen Commissioners' Technical Advisor for Facility Siting eileen.allen@energy.ca.gov

Galen Lemei Advisor to Presiding Member galen.lemei@energy.ca.gov

Jennifer Nelson Advisor to Presiding Member jennifer.nelson@energy.ca.gov

Jim Bartridge Advisor to Associate Member jim.bartridge@energy.ca.gov

#### <u>ENERGY COMMISSION –</u> STAFF

Mike Monasmith Senior Project Manager mike.monasmith@energy.ca.gov

Richard Ratliff
Staff Counsel IV
dick.ratliff@energy.ca.gov

Kerry Willis Staff Counsel kerry.willis@energy.ca.gov

#### <u>ENERGY COMMISSION –</u> <u>PUBLIC ADVISER</u>

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

#### **DECLARATION OF SERVICE**

I, <u>Mary Finn</u>, declare that on <u>October 2, 2012</u>, I served and filed copies of the attached <u>Hidden Hills Data Response</u>, <u>Set 2D-6</u> dated <u>October 2, 2012</u>. This document is accompanied by the most recent Proof of Service list, located on the web page for this project at: <u>www.energy.ca.gov/sitingcases/hiddenhills/index.html</u>.

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

(Check	k all that Apply)
For se	rvice to all other parties:
Х	Served electronically to all e-mail addresses on the Proof of Service list;
	Served by delivering on this date, either personally, or for mailing with the U.S. Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses marked *"hard copy required" or where no e-mail address is provided.
AND	
For fili	ng with the Docket Unit at the Energy Commission:
Х	by sending an electronic copy to the e-mail address below (preferred method); OR
	by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:
	CALIFORNIA ENERGY COMMISSION – DOCKET UNIT Attn: Docket No. 11-AFC-02 1516 Ninth Street, MS-4

#### Sacramento, CA 95814-5512 docket@energy.ca.gov

Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission Michael J. Levy, Chief Counsel 1516 Ninth Street MS-14 Sacramento, CA 95814 michael.levy@energy.ca.gov

OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Mary Finn