



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

Needles Field Office  
1303 South U.S. Highway 95  
Needles, CA 92363  
[www.ca.blm.gov/needles](http://www.ca.blm.gov/needles)

February 24, 2011

### Memorandum

To: Field Supervisor, Ventura Fish and Wildlife Office

From: Field Manager, Needles Field Office, California Desert District

Subject: Reinitiation of Consultation on BrightSource Energy's Ivanpah Solar Electric Generating System

The Bureau of Land Management (BLM), Needles Field Office, wishes to reinitiate formal Endangered Species Act consultation, pursuant to 50 CFR 402.16(b), for the Ivanpah Solar Energy Electric Generating System (Ivanpah SEGS) administered by BrightSource Energy in eastern San Bernardino County.

The Service issued Biological Opinion (BO) 8-8-10-F-24 on October 1, 2010 to minimize adverse effects on the threatened desert tortoise (*Gopherus agassizii*). The BLM has determined that a modification to the existing Biological Opinion is desirable based upon the attached concerns and improved minimization measures submitted by CH2M Hill on behalf of BrightSource. It is our desire that recent survey information, and the revised minimization measure, be addressed in a new BO. We are reviewing the existing Biological Assessment, and will be providing an updated version to your office in the near future.

The Ivanpah SEGS project involves the construction, operation and maintenance of a solar thermal power plant consisting of three separate units with shared infrastructure and administrative facilities. These completed facilities would have a combined net rating of 370 megawatts and would occupy a BLM right-of-way of 3,582 acres. This project is not within designated critical habitat for the desert tortoise.

We have discussed this request with Brian Croft of your staff. If you have any questions, contact Dr. Larry LaPré at 951.697.5218 or [llapre@ca.blm.gov](mailto:llapre@ca.blm.gov).

Attachment:

CH2MHill letter of January 3<sup>rd</sup>, 2011



**CH2MHILL**

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January 3, 2011

Mr. Tom Hurshman  
Project Manager  
Bureau of Land Management  
2465 South Townsend Avenue  
Montrose, Colorado 81401

Dr. Larry LaPre  
District Wildlife Biologist  
California Desert District  
Bureau of Land Management  
22835 Calle San Juan de los Lagos  
Moreno Valley, CA 92553

**SUBJECT: Reinitiation of Formal Consultation for the Ivanpah SEGS Project**

Dear Mr. Hurshman and Dr. LaPre:

Solar Partners I, LLC, Solar Partners II, LLC and Solar Partners VIII, LLC, collectively subsidiaries of the parent company BrightSource Energy, Inc. ("BrightSource"), request that the Bureau of Land Management ("BLM") reinitiate formal consultation with the U.S. Fish & Wildlife Service ("FWS") with respect to the Ivanpah Solar Electric Generating System Project ("ISEGS Project"), in accordance with Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531, *et seq.*). FWS issued its Biological Opinion, 81440-2010-F-0096, 8-8-10-F-24a, for the ISEGS Project on October 1, 2010 (hereinafter "October 2010 BiOp"). The consultation reviewed the effects of the proposed action on the federally threatened desert tortoise (*Gopherus agassizii*).

The primary reasons for reinitiating consultation are: 1) the preference to include the most recent version of the FWS desert tortoise translocation protocols; and 2) the potential, based on actions undertaken for the ISEGS Project to date, that a larger number of desert tortoise will be identified within the site boundaries than originally anticipated in the October 2010 BiOp. (Table 1 provides a master list of tortoise encountered, marked, and relocated on the project to date. Figure 1 shows the initial capture location, while Figure 2 shows the current location of transmitters.)

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We do not anticipate any change in the description of the Project Construction Area or the Purpose and Need Statement as referenced in the October 2010 BiOp. However, the Project Description as related to the translocation sites for desert tortoise may require modification to reflect the potential for additional individual tortoises requiring translocation.

There are additional considerations that warrant revising the Minimization Measures of the October 2010 BiOp for purposes of reinitiation. These include:

1. Facilitating desert tortoise movement that may be restricted by the project, the nearby Primm Valley Golf Club and the proposed Stateline photovoltaic project (to be located east of Ivanpah 3). BrightSource has proposed a habitat enhancement plan to BLM for the improvement of habitat connectivity to be funded with the mitigation funds. See Figure 3, which shows the plan to create habitat connectivity east and north of Ivanpah 1.
2. The October 2010 BiOp states that tortoises located within 500 meters adjacent to the western fence line of Ivanpah 1 and 2 and those encountered within 500 meters of the western and northern fence lines of Ivanpah 3 will be placed in areas adjacent to the fence on those sides.

***Modification Request:** In consideration of the proposed connectivity enhancement, BrightSource requests reconsideration so that translocation of tortoises found within 500 meters of all sides of Ivanpah 1 be placed adjacent to the closest fence. In addition, it is requested that tortoises on Ivanpah 2 found within the 500 meters of the eastern, western, northern and southwestern sides of the fence be placed adjacent to the closest fence and that those found within 500 meters of the southern (not contiguous with Ivanpah 2), eastern, western, and northern sides of Ivanpah 3 be placed adjacent to the closest fence.*

***Rationale:** The reason for this modification is to attempt to place tortoises close to or within their home range, thereby reducing stress to translocated and resident animals. Since all of the translocated tortoises will be tagged with transmitters and regularly tracked, if any appear stressed by a fence line and continually pace the fence, BrightSource will coordinate with the FWS for further recommendations. Fort Irwin data shows that tortoises moved 400 meters or less from their initial capture location moved significantly shorter distances after translocation than those that were moved longer distances. As stated in the 2009 Annual Report to FWS, at Fort Irwin, two years after translocation, adult tortoises that were translocated a short distance traveled approximately the same distance as the resident and control animals; however, adult tortoises that were translocated greater distances moved approximately three times the distance as the control and resident animals. Considering this, a tortoise moved a shorter distance may come into contact with not only fewer tortoises, but also with tortoises it may have come into contact with during a normal course of events (with no translocation). This is important when considering potential for disease transmission between translocated tortoises and those in the recipient population.*

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3. See pg. 18, #9 " . . . BrightSource only will perform release of cleared desert tortoises into a translocation area during the spring (April 1 to May 31) or early-fall (September 1 and October 1)."

*Modification Request: April 1 to 15 and September 20 to October 5 should be the intervals in which translocation is allowed.*

*Rationale: It is understood that coordination with FWS will take place prior to any translocation, so the consideration of drought-year translocations can be addressed on a case-by-case basis. However, high average daily temperatures and dwindling forage availability by mid-April will likely be factors affecting tortoise movements. As such, the new dates would present improved conditions for desert tortoise translocation. Similarly, average daily temperatures in early September may also be too high and translocations should be postponed to September 20<sup>th</sup> and occur no later than October 5<sup>th</sup>.*

4. See pg. 12, "When performing clearance surveys, authorized biologists and supervised desert tortoise monitors will conduct at least 3 complete clearance sweeps over a given phase with no transects wider than 30 feet" (we also believe that all measurements should be either metric [preferred] or standard).

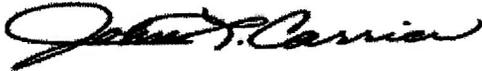
*Modification Request: At a minimum, the initial clearance survey coverage should be conducted at 5 meter intervals. Additional converges should be conducted at a maximum of 10 meters, but may be conducted more narrowly depending on vegetation density, topography and substrate and/or findings of the first coverage.*

*Rationale: This will increase the probability of encountering most of the tortoises during the first coverage and decrease the probability of having to conduct additional converges beyond the three required. Data from Line-Distance-Sampling shows approximately 70 percent of adult tortoises are observed at 10-meter intervals.*

Thank you for considering this request for reinitiated consultation and the above-noted proposals for modification to the October 2010 BiOp. Please do not hesitate to contact me should you have any questions.

Sincerely,

CH2M HILL



John L. Carrier, J.D.  
Program Manager

Enclosures

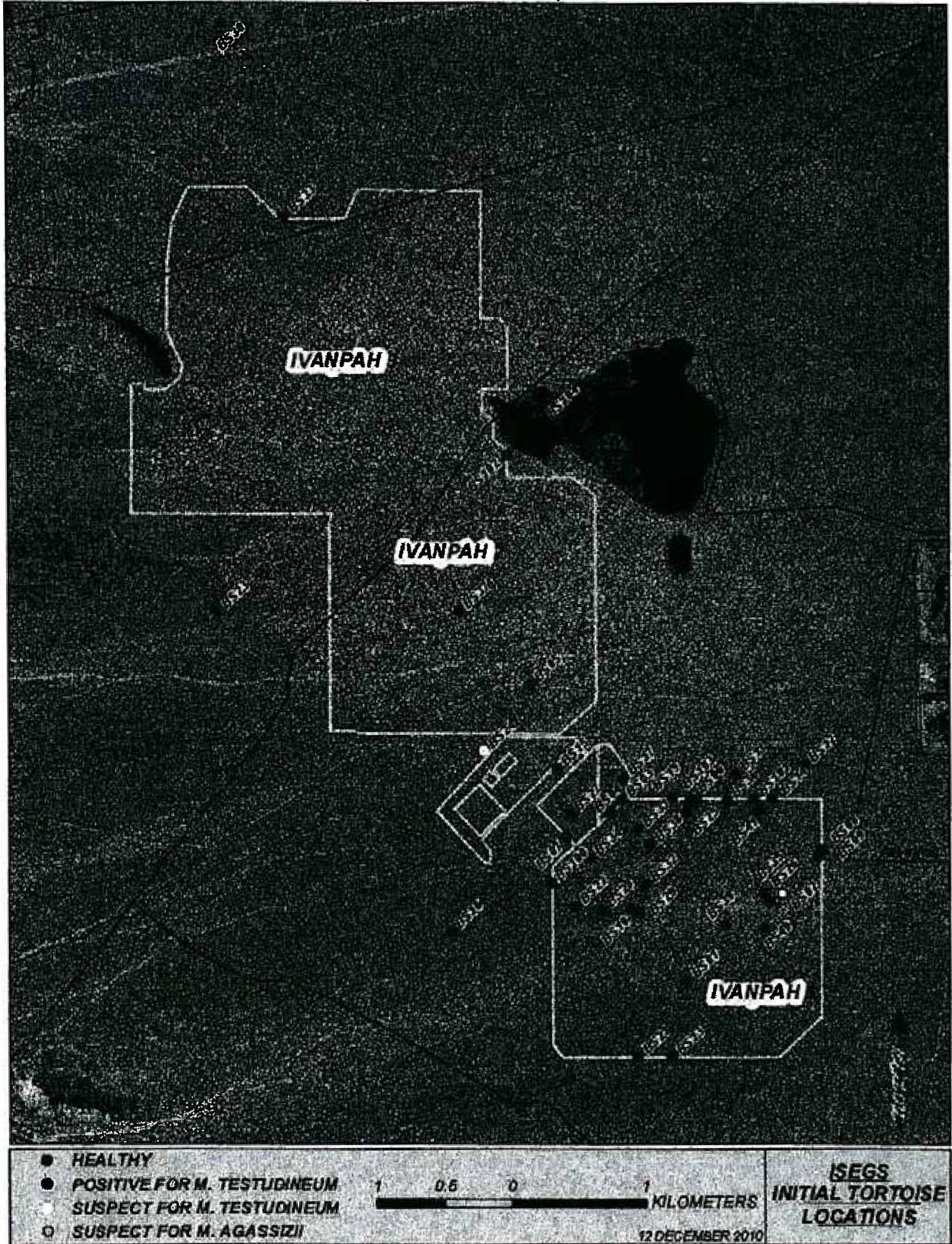
**TABLE 1**

Master list of desert tortoise encountered, marked, and relocated on the ISEGS Project, San Bernardino County, CA.

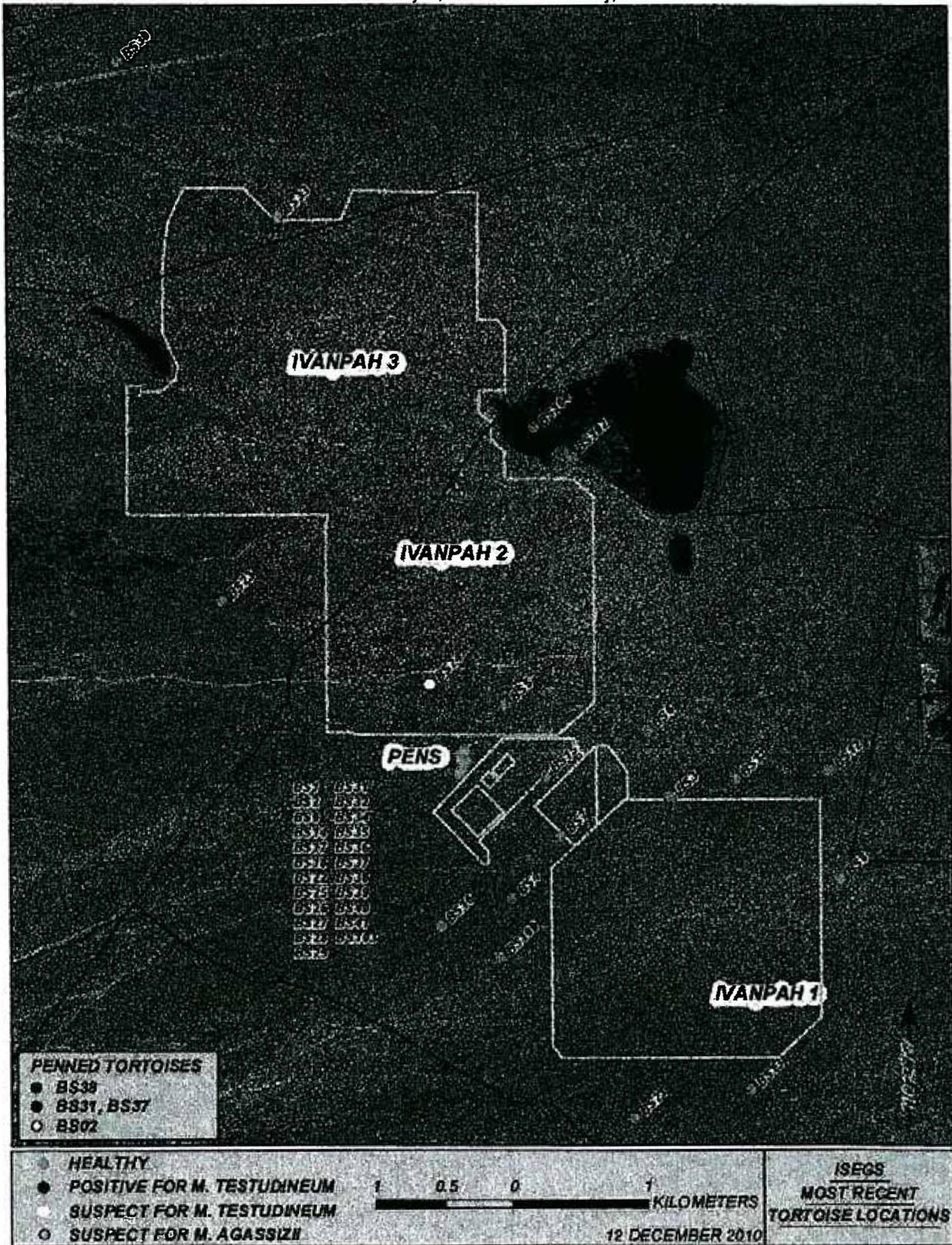
Tortoise ID	Sex	MCL	Weight	Tortoise Type	Health Assessment (Y/N)	Blood Assessment (Y/N)	ELISA STATUS (M. agassizii)	ELISA STATUS (M. testudineum)	Comments
BS1	Female	188	1350		Y	Y			
BS2	Male	261	3520		Y	Y	Suspect	Suspect	
BS3	Female	227	2300		N	N			
BS4	Male	250	2910		Y	Y			
BS5	Male	216	1880		N	N			
BS6	Male	257	2700		N	N			
BS7	Unknown	94	185		N	N			
BS8	Female	209	1800		N	N			
BS9	Male	261	3360		Y	Y			
BS10	Male	277	3650		N	N			
BS11	Female	202	1780		Y	Y			
BS12	Female	206	1690		Y	Y			
BS13	Male	245	2525		Y	Y			
BS14	Female	224	2250		Y	Y			
BS15	Unknown	190	1425		N	N			
BS16	Female	224	2140		N	N			
BS17	Unknown	116	320		Y	Y			
BS18	Unknown	71	85		Y	Y			
BS19	Unknown	118	365		N	N			
BS20	-	-	-	-	-	-	-	-	Euthanized at DTCC - Crushed carapace
BS21	Male	241	2790		Y	Y			
BS22	Male	252	2340		Y	Y			
BS23	Female	242	2700		N	N			

Tortoise ID	Sex	MCL	Weight	Tortoise Type	Health Assessment (Y/N)	Blood Assessment (Y/N)	ELISA STATUS (M. agassizii)	ELISA STATUS (M. testudineum)	Comments
BS24	Unknown	179	1290		Y	Y		Suspect	
BS25	Unknown	168	1120		Y	Y			
BS26	Unknown	123	370		Y	Y			
BS27	Female	232	2150		Y	Y			
BS28	Female	217	2060		Y	Y			
BS29	Male	265	3325		Y	Y			
BS30	Male	238	3000		Y	Y			
BS31	Unknown	133	530		Y	Y	Suspect	Positive	
BS32	Male	252	3160		Y	Y			
BS33	Female	225	2220		Y	Y			
BS34	Female	214	2050		Y	Y			
BS35	Unknown	143	640		Y	Y			
BS36	Unknown	150	720		Y	Y			
BS37	Male	243	2400		Y	Y	Suspect	Positive	
BS38	Female	223	2390		Y	Y		Positive	
BS39	Unknown	61	46		Y	N			
BS40	Unknown	69	72		Y	N			
BS41	Unknown	118	390		Y	Y			
BS100	Male	245	3050		Y	Y			
BS101	Male	276	4260		Y	Y			
BS102	Male	271	3800		Y	Y			
BS103	Male	251	3600		Y	Y			
BS104	Male	265	3275	-	-	-	-	-	Predation

**FIGURE 1.**  
Initial locations of tortoises found on the ISEGS Project, San Bernardino County, CA.



**FIGURE 2**  
 Most recent locations of tortoises found on the ISEGS Project, San Bernardino County, CA.



**FIGURE 3.**  
 Habitat enhancement proposed for the ISEGS Project, San Bernardino County, CA.

