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March 1, 2013

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 1C-5
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 a copy of Data Response Set 1C-5.

Please call me if you have any questions.

Sincerely,
CH2M HILL

A handwritten signature in blue ink that reads "John L. Carrier".

John L. Carrier, J.D.
Program Manager

Encl.

c: POS List
Project file

California Energy Commission

DOCKETED
11-AFC-02

TN # 69757

MAR. 01 2013

Data Response Set 1C-5

Hidden Hills

Solar Electric Generating System

(11-AFC-2)



Application for Certification
Hidden Hills Solar I, LLC; and Hidden Hills Solar II, LLC

March 2013

With Technical Assistance from



Hidden Hills Solar Electric Generating System (HHSEGS)

(11-AFC-2)

Data Response, Set 1C-5 (Response to Data Request 90)

Submitted to the
California Energy Commission

Submitted by
**Hidden Hills Solar I, LLC; and
Hidden Hills Solar II, LLC**

March 1, 2013

With Assistance from
CH2MHILL
2485 Natomas Park Drive
Suite 600
Sacramento, CA 95833

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Introduction

Attached are Hidden Hills Solar I, LLC, and Hidden Hills Solar II, LLC (collectively, “Applicant”) supplemental response to the California Energy Commission (CEC) Staff’s data request number 90 for the Hidden Hills Solar Electric Generating System (HHSEGS) Project (11-AFC-2). The CEC Staff served these data requests on November 17, 2011, as part of the discovery process for HHSEGS.

Biological Resources (90)

IMPACTS TO WATERS OF THE U.S.

BACKGROUND: Staff must present a full accounting of the waters of the U. S. (WOUS) on the project site. Waters of the U. S. are regulated by the U.S. Army Corps of Engineers (USACE) under Sections 401 and 404 of the federal Clean Water Act. Determination of WOUS and formulation of mitigation is regulated by the USACE. Section 5.2.8 of the AFC and Appendix 5.2E reference the existence of nine USGS-mapped blue line streams within the project site, and discuss the lack of hydric soils on the project site. Staff needs to verify this determination, and thoroughly evaluate the potential for impacts to blue line streams from the HHSEGS project.

DATA REQUEST

90. Please provide a copy of the USACE jurisdictional determination for waters of the U.S. (for all Section 404 regulated waters).

Response: By letter dated December 14, 2011, the USACE provided an Approved Jurisdictional Determination (AJD) that identified Drainage 50-1 and Drainage 24-1 as subject to federal jurisdiction as waters of the United States. The letter did not include the acreage of these jurisdictional waters. A copy of the AJD letter was provided in Data Response Set 1C as Attachment DR90-1. The Applicant subsequently received copies of the drainage forms completed for the AJD, which identify the acreages of the federally jurisdictional waters and are normally attached to an AJD letter. These forms were apparently omitted from the December 14, 2011 letter. For ease of reference, the December 14, 2011 letter is provided again as Attachment DR90-1. The AJD form for Drainage 50-1 is provided as Attachment DR 90-2 and indicates that the jurisdictional area of this drainage is 0.057 acre. The AJD form for Drainage 24-1 is provided as Attachment DR90-3 and indicates that the jurisdictional area of this drainage is 0.28 acre. Total acreage of waters of the U.S. on the HHSEGS site is, therefore, approximately 0.34 acre.

**Attachment DR90-1
USACE December 14, 2011 Letter**



ATTACHMENT DR90-1

DEPARTMENT OF THE ARMY

VENTURA REGULATORY FIELD OFFICE
2151 ALESSANDRO DRIVE, SUITE 110
VENTURA, CA 93001

December 14, 2011

REPLY TO
ATTENTION OF

Regulatory Division

Gary Kazio
BrightSource Energy Inc.
410 S. Rampart Blvd., Suite 390
Las Vegas, Nevada 89145

SUBJECT: Determination regarding Corps jurisdiction over interstate drainages on the Hidden Hills Ranch Project Site near Pahrump, Nevada

Dear Mr. Kazio:

I am responding to your request (File No. SPL-2011-00089-BAH) dated May 6, 2011 for a jurisdictional determination for BrightSource Energy's Hidden Hills Ranch Solar Project located in southeastern Inyo County, California near the town of Pahrump, Nye County, Nevada. We examined project information dated May 6, 2011 prepared by URS Corporation on your behalf, and conducted a site visit on May 31, 2011 by Regulatory project manager Bruce Henderson and Jean Paul Charpentier of URS Corporation. Based on this review and assessment of on-site conditions, we have determined the Hidden Hills Ranch Solar Project site contains waters of the United States pursuant to 33 C.F.R. §325.9, as well as additional drainage features we have determined to not be subject to Corps jurisdiction.

The Corps' evaluation process for determining if a Department of the Army permit would be required depends on whether the project is located within the Corps' geographic jurisdiction and if the proposed project includes an activity potentially regulated under Section 10 of the River and Harbor Act or Section 404 of the Clean Water Act. The project site is located immediately adjacent to the California/Nevada state boundary and drainage features that cross that boundary are identified as interstate waters pursuant to 33 C.F.R. 328.3(a)(2), provided they exhibit an ordinary high water mark. Of the interstate drainage features identified by URS Corporation as potentially jurisdictional, the May 31 site visit concluded that only two drainages, identified as Drainage 50-1 and Drainage 24-1, have an identifiable ordinary high water mark. These two drainages also demonstrated other characteristics to indicate they conveyed water at a somewhat greater frequency or duration, including supporting a vegetation community that differed from surrounding uplands and suggesting a wetter regime within the channels, and sorting of particle sizes within the drainage.

It is our understanding the solar energy project you propose would likely require maintenance and/or upgrading of the existing earthen roads, as well as potential road access within the project area. Your project may also require other utility infrastructure be installed. Therefore, we have determined your proposed project may involve a regulated activity located within the geographic jurisdiction of Section 404 of the Clean Water Act and a Section 404 permit would be required from our office.

This letter contains an approved jurisdictional determination for the Hidden Hills Ranch Solar Project site. If you object to this decision, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet (Appendix A) and Request for Appeal (RFA) form. If you request to appeal this decision you must submit a completed RFA form to the Corps South Pacific Division Office at the following address:

Tom Cavanaugh
Administrative Appeal Review Officer,
U.S. Army Corps of Engineers
South Pacific Division, CESPDPDS-O, 2042B
1455 Market Street, San Francisco, California 94103-1399

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 C.F.R. Part 331.5, and that it has been received by the Division Office within 60 days of the date on the NAP. Should you decide to submit an RFA form, it must be received at the above address by February 13, 2012. It is not necessary to submit an RFA form to the Division office if you do not object to the decision in this letter.

This verification is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. If you wish to submit new information regarding the approved jurisdictional determination for this site, please submit this information to Bruce Henderson at the letterhead address by February 13, 2012. The Corps will consider any new information so submitted and respond within 60 days by either revising the prior determination, if appropriate, or reissuing the prior determination. A revised or reissued jurisdictional determination can be appealed as described above.

This determination has been conducted to identify the extent of the Corps' Clean Water Act jurisdiction on the particular project site identified in your request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

If you have any questions, please contact Bruce Henderson of my staff at 805-585-2145 or via e-mail at Bruce.A.Henderson@usace.army.mil. Please be advised that you can now

comment on your experience with Regulatory Division by accessing the Corps web-based customer survey form at: <http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,

A handwritten signature in black ink, appearing to read "Aaron O. Allen". The signature is fluid and cursive, with a large loop at the end.

Aaron O. Allen, Ph.D.
Chief, North Coast Branch
Regulatory Division

Enclosures

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Gary Kazio, BrightSource Energy Inc.	File Number: SPL-2011-00089-BAH	Date: 12/14/2011
Attached is:		See Section below
<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
<input type="checkbox"/>	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
<input type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

DISTRICT ENGINEER
Los Angeles District, Corps of Engineers
ATTN: Chief, Regulatory Division
P.O. Box 532711
Los Angeles, CA 90053-2325
Tel. (213) 452-3425

If you only have questions regarding the appeal process you may also contact:

DIVISION ENGINEER
South Pacific Division, Corps of Engineers
Attn: Tom Cavanaugh
Administrative Appeal Review Officer
South Pacific Division, CESPDPDS-O, 2052B
1455 Market Street, San Francisco, California 94103-1399
Phone: (415) 503-6574 Fax: (415) 503-6646
Email: thomas.j.cavanaugh@usace.army.mil

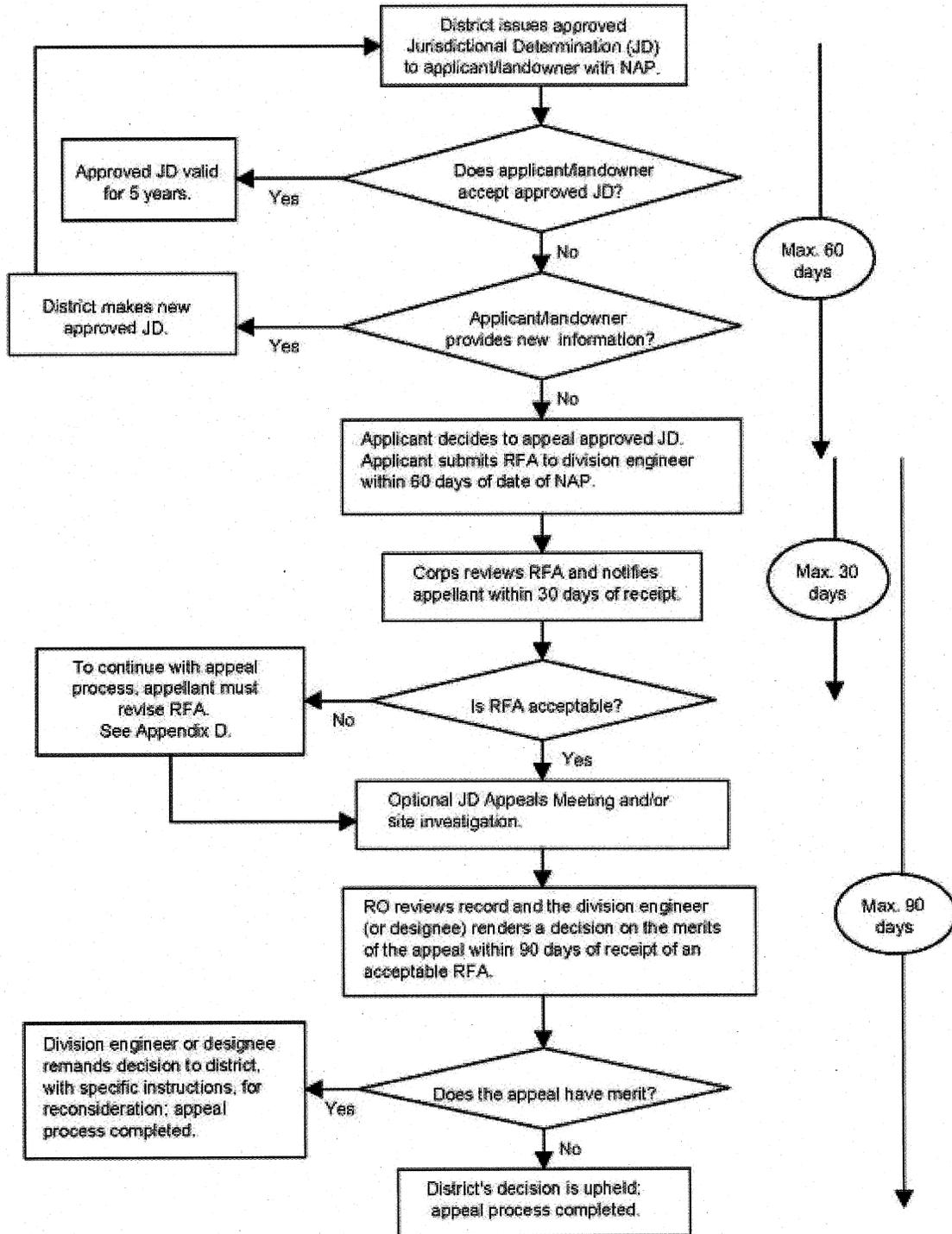
RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number:

Administrative Appeal Process for Approved Jurisdictional Determinations



Attachment DR90-2
AJD Form for Drainage 50-1

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): December 14, 2011

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: LA District, Hidden Hills Ranch Solar Project, 2011-00089-BAH (Drainage 50-1)

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: California County/parish/borough: Inyo City: Near Pahrump, Nevada
Center coordinates of site (lat/long in degree decimal format): Lat. 36.0018° **N**, Long. -115.8952° **W**.
Universal Transverse Mercator:

Name of nearest waterbody: Pahrump Playa

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Not applicable.

Name of watershed or Hydrologic Unit Code (HUC): Ivanpah-Pahrump Valleys, 16060015

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: September 15, 2011

Field Determination. Date(s): August 29, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- Impoundments of jurisdictional waters
- Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 0.057 acres.

Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Established by OHWM.

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: **Drainage feature 50-1 is a small interstate isolated water based on the presence of an intermittent OHWM.**

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

The drainage is one of a series of drainage features that cross the state boundary, and only one of two that could be identified to have any prominence not exhibited by lesser drainage features nearby. The feature is approximately 5-8 feet in width at top of channel, with a bottom width varying from approximately 1-2 feet. This feature is located in a region with less than 5 inches of rainfall on a mean annual basis. Drainage 50-1 is essentially dry with minimal flow during typical rainfall events that likely infiltrate into the sandy substrate common to the area. Summer monsoonal events exceed infiltration rates and drainage features such as Drainage 50-1 convey substantially larger quantities, resulting in redistribution and sorting of particles ranging from silts to coarse sands or finer gravels. These larger flows are on the order of several cubic feet per second and represent a concentration of surface flows within the area. Drainage 50-1 is not an adjacent or abutting wetland and it is not tributary to a traditionally navigable water (TNW). The project site is approximately 68 aerial miles west of Lake Meade, the nearest TNW. Drainage 50-1 drains to the "Pahrump Playa" in California several miles west of the town of Pahrump, Nevada. The "Pahrump Playa," apparently without an official name, is a non-navigable dry lake bed without an outlet. Aquatic functions and services associated with the drainage feature are minimal relative to the surrounding uplands. In addition to limited sorting of sediment within the channel, other factors tipping the scale to determine jurisdictional status of Drainage 50-1 was the variation in vegetation communities within the channel compared to upland vegetative communities. The in-channel vegetation was not aquatic, being comprised of brome grasses and a small number of other herbaceous upland species. However, this contrasted with interspersed and adjacent upland vegetation comprised of bladderpod and other desert alluvium species.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: **Not applicable.**

Summarize rationale supporting determination: The nearest TNW is Lake Mead, a reservoir on the Colorado River approximately 68 miles east of the project site near Pahrump, Nevada. The site drainage flows to the unnamed playa ("Pahrump Playa") located approximately 4 miles west of Pahrump on the California side of the state boundary.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": Not applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: **acres**
Drainage area: **acres**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
 Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW⁵: Not applicable.

Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain: .
 Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):

Average width: . feet
Average depth: . feet
Average side slopes: **Pick List**.

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover:
 Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .

Presence of run/riffle/pool complexes. Explain: .

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: .

Other information on duration and volume: .

Surface flow is: **Pick List**. Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

Dye (or other) test performed: .

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;
 physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: .

Identify specific pollutants, if known: .

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

⁶ A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width): .
- Wetland fringe. Characteristics: .
- Habitat for:
 - Federally Listed species. Explain findings: .
 - Fish/spawn areas. Explain findings: .
 - Other environmentally-sensitive species. Explain findings: .
 - Aquatic/wildlife diversity. Explain findings: .

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: .

Ecological connection. Explain: .

Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

Riparian buffer. Characteristics (type, average width): vegetation consists of herbaceous seasonal wetland species typical of Southern California.

Vegetation type/percent cover. Explain: .

Habitat for:

Federally Listed species. Explain findings: .

Fish/spawn areas. Explain findings: .

Other environmentally-sensitive species. Explain findings: .

Aquatic/wildlife diversity. Explain findings: .

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N) Size (in acres) Directly abuts? (Y/N) Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: Not applicable.
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Not applicable.
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Not applicable.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
 Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
 Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
 from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
 which are or could be used for industrial purposes by industries in interstate commerce.
 Interstate isolated waters. Explain: Drainage 50-1 crosses the California/Nevada state boundary perpendicularly. It flows to the non-navigable unnamed dry lake ("Pahrump Playa") approximately 4 miles west of the town of Pahrump, Nevada. The playa has no outlet.
 Other factors. Explain: .

⁸See Footnote # 3.

⁹To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Identify water body and summarize rationale supporting determination: Drainage 50-1 is one of two drainages that demonstrate an intermittent OHWM and cross the California/Nevada state boundary. In addition to the intermittent OHWM, Drainage 50-1 has a moderate variation of in-channel vegetation comprised of brome and other grasses that is of limited occurrence away from the channel. In addition, Drainage 50-1 sorts and redistributes sediments of varying sizes along its reach within the project site boundaries..

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: 3-5000 linear feet of 2-3 feet in width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters: Not applicable.
- Wetlands: 0.0 acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See attached Maps.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Caldera Springs, California; Mound Springs, California; and Stump Spring, Nevada, 7.5-minute USGS quadrangle maps; applicant merged portions of these maps as their project graphic Appendix D.
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: 06027C4625D, 06027C4650D, and possibly 06027C4175C.
- 100-year Floodplain Elevation is: approximately 780 feet (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Appendix C: Project Panel Boundaries Maps (1-11).
 - or Other (Name & Date): Appendix A: photographic log of 42 representative photos taken at ground level.
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

Attachment DR90-3
AJD Form for Drainage 24-1

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): December 14, 2011

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: LA District, Hidden Hills Ranch Solar Project, 2011-00089-BAH (Drainage 24-1)

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: California County/parish/borough: Inyo City: Near Pahrump, Nevada
Center coordinates of site (lat/long in degree decimal format): Lat. 35.9922° **N**, Long. -115.8827° **W**.
Universal Transverse Mercator:

Name of nearest waterbody: Pahrump Playa

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Not applicable.

Name of watershed or Hydrologic Unit Code (HUC): Ivanpah-Pahrump Valleys, 16060015

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: September 15, 2011

Field Determination. Date(s): August 29, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- Impoundments of jurisdictional waters
- Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 0.28 acres.

Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Established by OHWM.

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: **Drainage feature 24'-1 is a small interstate isolated water based on the presence of an intermittent OHWM.**

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

The drainage is one of a series of drainage features that cross the state boundary, and only one of two that could be identified to have any prominence not exhibited by lesser drainage features nearby. The feature is approximately 3-4 feet in width at top of channel, with a bottom width varying from approximately 1-1.5 feet. This feature is located in a region with less than 5 inches of rainfall on a mean annual basis. Drainage 24-1 is essentially dry with minimal flow during typical rainfall events that likely infiltrate into the sandy substrate common to the area. Summer monsoonal events exceed infiltration rates and drainage features such as Drainage 24-1 convey substantially larger quantities, resulting in redistribution and sorting of particles ranging from silts to coarse sands or finer gravels. These larger flows are on the order of several cubic feet per second and represent a concentration of surface flows within the area. Drainage 24-1 is not an adjacent or abutting wetland and it is not tributary to a traditionally navigable water (TNW). The project site is approximately 68 aerial miles west of Lake Meade, the nearest TNW. Drainage 24-1 drains to the "Pahrump Playa" in California several miles west of the town of Pahrump, Nevada. The "Pahrump Playa," apparently without an official name, is a non-navigable dry lake bed without an outlet. Aquatic functions and services associated with the drainage feature are minimal relative to the surrounding uplands. In addition to limited sorting of sediment within the channel, other factors tipping the scale to determine jurisdictional status of Drainage 24-1 was the variation in vegetation communities within the channel compared to upland vegetative communities. The in-channel vegetation was not aquatic, being comprised of brome grasses and a small number of other herbaceous upland species. However, this contrasted with interspersed and adjacent upland vegetation comprised of bladderpod and other desert alluvium species.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: **Not applicable.**

Summarize rationale supporting determination: The nearest TNW is Lake Mead, a reservoir on the Colorado River approximately 68 miles east of the project site near Pahrump, Nevada. The site drainage flows to the unnamed playa ("Pahrump Playa") located approximately 4 miles west of Pahrump on the California side of the state boundary.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": Not applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: **acres**
Drainage area: **acres**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
 Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW⁵: Not applicable.

Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain: .
 Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):

Average width: feet
Average depth: feet
Average side slopes: **Pick List**.

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover:
 Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: the drainage feature has been created to discharge flows from a water pumping station into several groundwater recharge basins..

Presence of run/riffle/pool complexes. Explain: N/A.

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: .

Other information on duration and volume: .

Surface flow is: **Pick List**. Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

Dye (or other) test performed: .

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;
 physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: .

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

⁶ A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

Identify specific pollutants, if known: .

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain:

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List**. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain:

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

Riparian buffer. Characteristics (type, average width): vegetation consists of herbaceous seasonal wetland species typical of Southern California.

Vegetation type/percent cover. Explain:

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N) Size (in acres) Directly abuts? (Y/N) Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: Not applicable.
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Not applicable.
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Not applicable.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
 Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
 Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
 Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
 from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
 which are or could be used for industrial purposes by industries in interstate commerce.
 Interstate isolated waters. Explain: Drainage 24-1 crosses the California/Nevada state boundary perpendicularly. It flows to the non-navigable unnamed dry lake ("Pahrump Playa") approximately 4 miles west of the town of Pahrump, Nevada. The playa has no outlet.
 Other factors. Explain: .

⁸See Footnote # 3.

⁹To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Identify water body and summarize rationale supporting determination: Drainage 24-1 is one of two drainages that demonstrate an intermittent OHWM and cross the California/Nevada state boundary. In addition to the intermittent OHWM, Drainage 24-1 has a moderate variation of in-channel vegetation comprised of brome and other grasses that is of limited occurrence away from the channel. In addition, Drainage 24-1 sorts and redistributes sediments of varying sizes along its reach within the project site boundaries..

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: 1-2000 linear feet of 1-1.5 feet in width (ft).
- Other non-wetland waters: acres.
 Identify type(s) of waters: .
- Wetlands: 0.0 acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See attached Maps.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Caldera Springs, California; Mound Springs, California; and Stump Spring, Nevada, 7.5-minute USGS quadrangle maps; applicant merged portions of these maps as their project graphic Appendix D.
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: 06027C4625D and 06027C4650D,.
- 100-year Floodplain Elevation is: 780' msl (National Geodectic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Appendix C: Project Panel Boundaries Maps (1-11).
 or Other (Name & Date): Appendix A: photographic log of 42 representative photos taken at ground level.
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
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**APPLICATION FOR CERTIFICATION FOR THE
HIDDEN HILLS SOLAR ELECTRIC
GENERATING SYSTEM**

Docket No. 11-AFC-02

**PROOF OF SERVICE
(Revised 2/21/13)**

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*After docketing, the Docket
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KAREN DOUGLAS
Commissioner and Presiding
Member

DAVID HOCHSCHILD
Commissioner and Associate
Member

Ken Celli
Hearing Adviser

Galen Lemei
Adviser to Presiding Member

Jennifer Nelson
Adviser to Presiding Member

TBD
Adviser to Associate Member

Eileen Allen
Commissioners' Technical
Adviser for Facility Siting

DECLARATION OF SERVICE

I, Mary Finn, declare that on March 1, 2013, I served and filed copies of the attached Data Response, Set 1C-5, dated March 1, 2013. This document is accompanied by the most recent Proof of Service, which I copied from the web page for this project at: <http://www.energy.ca.gov/sitingcases/hiddenhills/>.

The document has been sent to the other persons on the Service List above in the following manner:

(Check one)

For service to all other parties and filing with the Docket Unit at the Energy Commission:

I e-mailed the document to all e-mail addresses on the Service List above and personally delivered it or deposited it in the US mail with first class postage to those parties noted above as "hard copy required"; **OR**

Instead of e-mailing the document, I personally delivered it or deposited it in the US mail with first class postage to all of the persons on the Service List for whom a mailing address is given.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am over the age of 18 years.

Dated: 3/1/13



Mary Finn
CH2M HILL