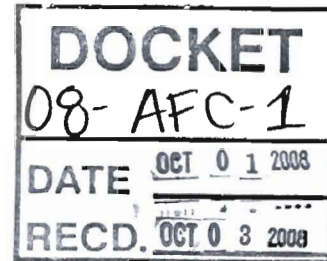


**Avenal Power Center, LLC  
500 Dallas Street, Level 31  
Houston, TX 77002**

October 1, 2008

Gerardo Rios  
Chief, Air Permits Office  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne Street  
San Francisco, CA 94105



**Re: Avenal Energy, Docket No. 08-AFC-1:  
Response to U.S. Fish and Wildlife Service September 8, 2008 Letter to U.S.  
Environmental Protection Agency, Region 9**

Dear Mr. Rios:

Please find enclosed the Avenal Power Center, LLC response to the U.S. Fish and Wildlife Service's September 8, 2008 request for information concerning the "Avenal Energy" project. For your convenience, a copy of the September 8, 2008 request for information is attached.

We believe that the enclosed response and attendant exhibits comprehensively address the request for information and fulfill the remaining information needs for the U.S. Fish and Wildlife Service to begin formal consultation under Section 7 of the Endangered Species Act. If you have questions regarding the enclosed response, or require any additional information, please do not hesitate to call.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. P. Rexroad".

J. P. Rexroad  
Vice President  
Avenal Power Center, LLC

Attachment: U.S. Fish and Wildlife Service September 8, 2008 letter

Enclosure: Avenal Power Center, LLC Response to Request for Information from the U.S.  
Fish and Wildlife Service

cc: Shirley Rivera, U.S. Environmental Protection Agency, Region 9  
Peter A. Cross, U.S. Fish and Wildlife Service  
Christopher Meyer, California Energy Commission

**Avenal Power Center, LLC Response**  
**to Request for Information from the U.S. Fish and Wildlife Service**

**1) On page 2-50 in section 2.3.18.7 -Construction Offices, Parking and Laydown Areas, is the statement, 'a security fence will be installed around the Site boundary, including laydown areas.**

a) What type of security fence will be placed around the Site boundary (barbed wire, chain-link, cyclone)?

As shown on Exhibit 1-1, permanent fencing will be constructed at the perimeter of the 148-acre parcel, except the perimeter fence will be held back 300 feet from the San Luis Canal (measured from the inside top of the canal embankment). This fencing will consist of 4-foot high wire-strand fencing and is identified as “proposed fence (typ)” on Exhibit 1-1.

An additional permanent Plant security fence will be constructed at the perimeter of the power block area and around the storm water evaporation/percolation basin. This fence is identified as “proposed security fence (typ)” on Exhibit 1-1 and will consist of a grounded seven-foot high chain link fence with one foot of security wire (e.g., razor wire) at the top.

During construction, temporary security fencing will be placed within the temporary construction disturbance areas as needed. These temporary chain link fences will be removed from each of the temporary disturbance areas as construction disturbances conclude.

b) Will this security fence remain around the Site boundary during operation?

Both the perimeter fence and Plant security fence will remain during operation. The temporary security fencing will be removed as construction disturbances conclude.

c) What is the total acreage inside this fencing?

The total permanent disturbed acreage inside the Plant security fence will be 28.2 acres. The total acreage located within the Plant security fence will be 31.9 acres.

d) Will there be additional fencing separating plant facilities from the remainder of the site?

As stated in response 1a above, a permanent Plant security fence will be constructed at the perimeter of the power block area (see Exhibit 1-1) and around the storm water evaporation/percolation basin. This Plant security fence will separate Plant facilities from the remainder of the site.

e) What type of fencing will be placed around the plant facilities?

As stated in response 1a above, the permanent Plant security fence will consist of a grounded seven-foot high chain link fence with one foot of security wire (e.g., razor wire) at the top.

f) How many acres are within the fencing for the plant facilities?

As stated in 1c above, the total disturbed acreage inside the permanent Plant security fence will be 28.2 acres. The total acreage located inside the Plant security fence will be 31.9 acres. The remainder of the 148-acre site will be located within the perimeter fencing except for the portion of the site located within the 300-foot setback from the San Luis Canal (measured from the inside top of the canal embankment).

The temporary construction fence will be installed only as needed to supplement the permanent fencing to provide temporary security around equipment and materials. It would be installed within the limits of the staging and laydown areas shown in Exhibit 1-1, so the maximum possible area enclosed by this temporary fence would be up to 33.5 acres of temporary construction disturbance.

**2) On page 2-50 in section 2.3.18.6 -Mobilization, is a statement that gravel and road base material will be used for 'temporary' roads, laydown, parking and work areas. Per Figure 2.3 12, this totals to 35.25 acres potentially covered in gravel and/or road base materials (24.10 acres construction laydown, 3.05 acres heavy equipment parking, 4.5 acres craft parking, 1.45 acres staff parking, 2.15 acres temporary road access).**

a) How much of this 35.25 acres will remain covered in gravel or road base material once construction is complete?

Exhibit 1-1 provides an updated Figure 2.3-12. Gravel will be removed from all of the temporary disturbance areas at the completion of construction, so none of the temporary disturbances will be covered with gravel once construction is complete. A portion of what was formerly identified as the “temporary access roadway” (formerly 2.15 acres) is now designated as a “secondary access road” (including a 0.6 acre segment and a 0.8 acre segment, for a total of 1.4 acres) that will remain in place as an emergency access roadway during operations, per a request from the California Energy Commission. This 1.4 acre area will potentially remain covered in gravel or road base material once construction is complete. This area is now included in the project’s revised permanent (operations) disturbance estimate provided in Exhibit 1-2.

b) Other than the 35.25 acres so outlined in Figure 2.3-12, will there be any areas not currently included as permanent impacts that will be areas covered in road material or gravel?

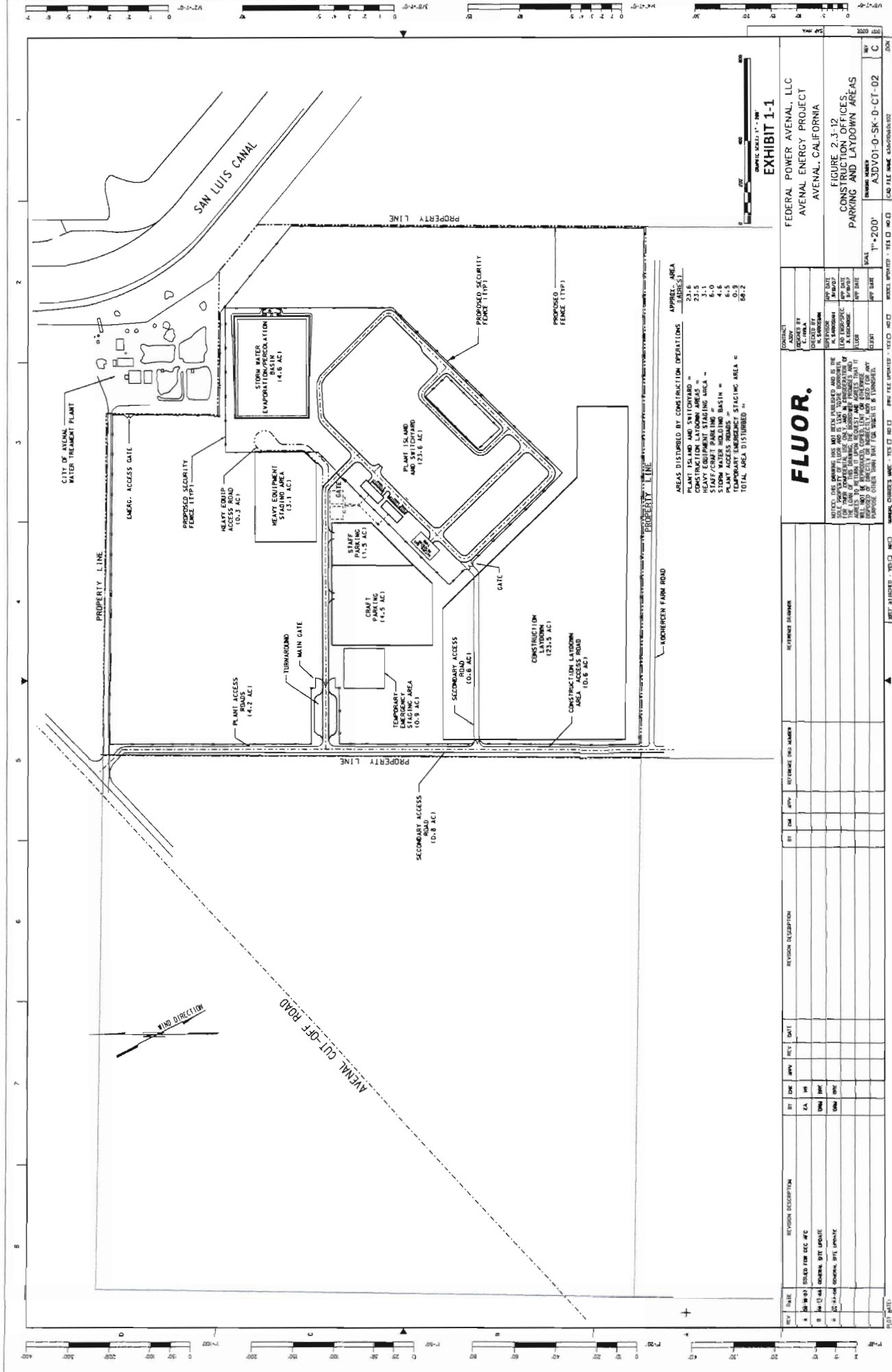
The acres outlined in Figure 2.3-12 provided as Exhibit 1-1 show both temporary and permanent disturbances. The temporary acreage potentially covered in gravel and/or road base materials includes construction laydown (23.5 acres), heavy equipment staging area (3.1 acres), craft parking (4.5 acres), and staff parking (1.5 acres). The secondary access road will stay as an emergency access road during operations and will potentially be covered in gravel and/or road base materials, so the total temporary impacts potentially covered in road material or gravel will total 32.6 acres. Upon

completion of construction, all temporary disturbances will be returned to substantially similar conditions as exist prior to the initiation of construction at the site.

**3) On page 2-52, table 2.3-7 gives an estimate of 28 acres temporary disturbance for the construction of the power generation facility. A review of the acreage provided in Figure 2.3-12 suggests these numbers should be 33.1 acres temporary disturbance.**

a) Please provide details of the temporary disturbance calculation for the power generation facility that resolves this discrepancy.

Revised Figure 2.3-12 is provided as Exhibit 1-1. Revised AFC Table 2.3-7 with the disturbed acreage estimates is provided as Exhibit 1-2. The updated temporary disturbance calculation for the construction of the power generation facility is 33.5 acres.



**AREAS DISTURBED BY CONSTRUCTION OPERATIONS**

APPROX. AREA (ACRES)	LABEL(S)
21.6	PLANT ISLAND AND TURNAROUND
21.6	STAFF/CRANE PARKING
3.1	HEAVY EQUIPMENT STAGING AREA
6.0	STAFF/CRANE PARKING
6.5	PLANT ACCESS ROADS
0.3	TEMPORARY EMERGENCY STAGING AREA
68.2	TOTAL AREA DISTURBED

**EXHIBIT 1-1**

FEDERAL POWER AVENAL, LLC  
AVONAL ENERGY PROJECT  
AVONAL, CALIFORNIA

FIGURE 2.3-12  
CONSTRUCTION OFFICES  
PARKING AND LAYDOWN AREAS

SCALE: 1"=200'  
DATE: 05/11/2011

**FLUOR.**

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE PROPERTY OF FLUOR CORPORATION. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF FLUOR CORPORATION. ANY UNAUTHORIZED REPRODUCTION OR TRANSMISSION IS STRICTLY PROHIBITED AND WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.

NO.	DATE	BY	DESCRIPTION

NO.	DATE	BY	DESCRIPTION

NO.	DATE	BY	DESCRIPTION

NO.	DATE	BY	DESCRIPTION

NO.	DATE	BY	DESCRIPTION

NO.	DATE	BY	DESCRIPTION

NO.	DATE	BY	DESCRIPTION

NO.	DATE	BY	DESCRIPTION

## EXHIBIT 1-2

### TABLE 2.3-7

### ESTIMATED ACREAGE OF CONSTRUCTION AND OPERATIONS AREAS<sup>(1)</sup> (Rev. 9/23/08)

PROJECT COMPONENT	ESTIMATED AREA (acres)		NOTES
	Temporary (Construction Only)	Permanent (Operations)	
Power Generation Facility	<del>2833.5</del>	<del>2328.2</del>	Temporary construction includes laydown, topsoil storage, parking, <del>and</del> construction office area, <del>and temporary emergency staging area</del> . Permanent disturbance is the <del>disturbed</del> area within the fence line including the power block, switchyard, ZLDF, air-cooled condenser and stormwater retention basin, <del>as well as 2.5 acres of drainage swales located at the perimeter of the plant security fence.</del>
Plant Access Road	<del>62.4</del>	<del>24.1</del>	Road length is approximately <del>2,600</del> <del>2,610</del> ft from the pavement on Avenal Cutoff Road to the power block entrance. Permanent disturbance is 30 ft wide (20-ft-wide pavement plus 5-ft shoulder on each side); temporary construction disturbance <del>is 70 ft wide (not including permanent road area)</del> . <del>Temporary disturbance also includes an additional 2 acres for a road to the construction laydown area includes an additional 10 feet of grading on each side of the road and an additional 2.7 acres for a secondary access road and temporary construction laydown and heavy equipment staging area access roads.</del>
Transmission Line Interconnection	<del>403.6</del>	<del>1.2</del>	Transmission line from the Site switchyard to the existing PG&E Gates substation will require approximately 43 structures. Each structure will require approximately <del>40,000</del> <del>3,600</del> sq ft of temporary disturbance (total of <del>9.93</del> <del>6</del> acres). Permanent average disturbance of 1,200 sq ft per structure will be required (total of 1.2 acres). <del>Temporary disturbance area for pull sites is included in the 3.6 acres of temporary disturbance.</del>
Natural Gas Pipeline Interconnection	<del>51.1</del>	0	Approximately <del>4,000</del> <del>2,000</del> ft of the pipeline interconnection will occur outside Avenal Cutoff Road and Plymouth Avenue rights-of-way, with an average disturbance corridor of approximately <del>50</del> <del>25</del> ft. Work within the existing City rights-of-way is not included in this calculation because work will occur entirely within the paved width of the roads and the dirt shoulders that have no cover vegetation.
Water Supply Pipelines	<del>405.5</del>	0	Water supply pipeline 1.8 miles in total length from three wells to the power block battery units. No temporary or permanent access road is required. Construction disturbance will average <del>25</del> <del>50</del> ft wide.
Gates Substation Improvements	0	0	Activity will occur at the existing substation in an area that is already 100% disturbed with a graded gravel surface and no vegetation.
<b>TOTAL</b>	<del><b>5946.1</b></del>	<del><b>2633.5</b></del>	--

(1) Project facilities will occur entirely on land that has been intensively disturbed by agricultural activities. No new ground disturbance will occur due to the Project.



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825-1846

In Reply Refer To:  
81420-2008-TA-1447-1

SEP 08 2008 RECEIVED

Gerardo C. Rios  
Chief, Air Permits Office  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne Street  
San Francisco, California 94105-3901

SEP 17 2008

Air Division, AIR - 3  
U.S. EPA, REGION 9

Subject: Avenal Power Center, LLC Avenal Energy Request for Formal  
Consultation under Section 7 of the Endangered Species Act.

Dear Mr. Rios:

This letter responds to your July 10, 2008, request for Formal Programmatic Consultation for Avenal Power Center, LLC (applicant), proposed Avenal Energy Power Facility (proposed project). The U.S. Fish and Wildlife Service (Service) received your request on July 14, 2008. Submitted on May 12, 2008 and received in this office on May 13, 2008 in a separate correspondence sent by the applicant was the *Avenal Energy Project, LLC Application for Certification to the California Energy Commission, section 2.0 and section 6.6*, (biological assessment) prepared by TRC Solutions in April 2008. The Service has agreed to accept this document as the biological assessment for the proposed project. Additional information, requested from the applicant on July 29, 2008 was received by the Service on August 18, 2008.

The applicant proposes to construct and operate a 600 megawatt combined-cycle electric power generating plant and ancillary facilities on a 148 acre parcel in the City of Avenal, Kings County, California. Your letter identified the following federally-listed species as species that may be affected by the project: San Joaquin kit fox (*Vulpes macrotis mutica*), blunt-nosed leopard lizard (*Gambelia sila*), California jewelflower (*Calanthus californicus*), and San Joaquin woolly-threads (*Lambertia congdonii*). Per the biological assessment the site designated for the proposed project has been disturbed by agricultural production for 50 years. The blunt-nosed leopard lizard (*Gambelia sila*), California jewelflower (*Calanthus californicus*), and San Joaquin woolly-threads (*Lambertia congdonii*) require undisturbed alkali scrub or alkali grasslands. The Service believes that the project as proposed is unlikely to adversely affect the blunt-nosed leopard lizard (*Gambelia sila*), California jewelflower (*Calanthus californicus*), and San Joaquin woolly-threads (*Lambertia congdonii*). The proposed project may adversely affect the San Joaquin kit fox (*Vulpes macrotis mutica*). We are discussing a setback from the canal with the applicant to benefit the kit fox.

TAKE PRIDE  
IN AMERICA 

The Service has reviewed your letter and the biological assessment and has determined that we have not received all of the information necessary to initiate formal consultation as outlined in the regulations governing interagency consultations (50 CFR § 402.14). We are requesting additional information that will allow us to assess and analyze project effects.

The following questions relate to information from the biological assessment.

1) On page 2-50 in section 2.3.18.7 - Construction Offices, Parking and Laydown Areas, is the statement, 'a security fence will be installed around the Site boundary, including laydown areas'.

- a) What type of security fence will be placed around the Site boundary (barbed wire, chain-link, cyclone)?
- b) Will this security fence remain around the Site boundary during operation?
- c) What is the total acreage inside this fencing?
- d) Will there be additional fencing separating plant facilities from the remainder of the site?
- e) What type of fencing will be placed around the plant facilities?
- f) How many acres are within the fencing for the plant facilities?

2) On page 2-50 in section 2.3.18.6 – Mobilization, is a statement that gravel and road base material will be used for 'temporary' roads, laydown, parking and work areas. Per Figure 2.3 – 12, this totals to 35.25 acres potentially covered in gravel and/or road base materials (24.10 acres construction laydown, 3.05 acres heavy equipment parking, 4.5 acres craft parking, 1.45 acres staff parking, 2.15 acres temporary road access).

- a) How much of this 35.25 acres will remain covered in gravel or road base material once construction is complete?
- b) Other than the 35.25 acres so outlined in Figure 2.3-12, will there be any areas not currently included as permanent impacts that will be areas covered in road material or gravel?

3) On page 2-52, table 2.3-7 gives an estimate of 28 acres temporary disturbance for the construction of the power generation facility. A review of the acreage provided in Figure 2.3-12 suggests these numbers should be 33.1 acres temporary disturbance.

- a) Please provide details of the temporary disturbance calculation for the power generation facility that resolves this discrepancy.

Until we receive the information requested and required by 50 CFR 402.14(c) and 50 CFR 402.14 (d), the Service will not begin the formal consultation process for the project. We will notify your office when we receive this additional information. If we have not received this information within 60 days of the date of this letter, we no longer track this action as an active endangered species consultation. Reinitiation of consultation will require a letter from you that includes the requested information.



We appreciate your efforts to conserve federally-listed species and your efforts to reduce the potential effects to listed species that may result from the Avenal Power LLC Avenal Energy project. If you have any questions or concerns about this consultation, please contact Shelley Buranek or Susan Jones of my staff at (916) 414-6600.

Sincerely,

A handwritten signature in black ink that reads "Peter A. Cross". The signature is written in a cursive style with a large, stylized "P" and "C".

Peter A. Cross  
Deputy Assistant Field Supervisor

cc:

California Department of Fish and Game, Fresno (Mr. Justin Sloan)  
Avenal Power, LLC (Mr. Jim Renroad)