

CALIFORNIA ENERGY COMMISSION

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March 25, 2008

Mr. Mark Turner
Project Manager
CPV Sentinel, LLC
55 Second Street, Suite 525
San Francisco, CA 94105

DOCKET	
07-AFC-3	
DATE	MAR 25 2008
RECD.	MAR 25 2008

Dear Mr. Turner:

RE: CPV SENTINEL ENERGY PROJECT DATA REQUESTS #2 (66 - 97)

Pursuant to Title 20, California Code of Regulations, Section 1716, the California Energy Commission staff seeks the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

This set of data requests (#66 - 97) is being made in the areas of Biology, Cultural Resources, Socioeconomics, and Water Resources. Written responses to the enclosed data requests are due to the Energy Commission staff on or before April 14, 2008, or at such later date as may be mutually agreeable.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to both the Committee and me within 20 days of receipt of this notice. The notification must contain the reasons for not providing the information, the need for additional time and the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)). (Note: Response to Data Request 66 regarding spring 2008 sensitive plant survey information, will not be able to be provided until after the April 14th due date. No written request for additional time is necessary for this item.

If you have any questions, please call me at (916) 654-4206 or email me at bpfanner@energy.state.ca.us.

Sincerely,

Bill Pfanner
Bill Pfanner
Project Manager

Enclosure

cc: Docket (07-AFC-3)
Proof of Service List

PROOF OF SERVICE (REVISED 10/15/07) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 3/25/08
CF

CPV Sentinel (07-AFC-3) Data Requests

Technical Area: Biological Resources
Author: Michelle Lee Mattson

BACKGROUND

The application for the CPV Sentinel Energy Project, Biological Resources Section 7.2 states that the project would not impact special-status plant species, special-status wildlife species, or water bodies. The application states that no indications of special-status species were observed during field surveys. However, surveys by the applicant's consultant were reconnaissance level on February 26, 2007, April 3, 2007, and May 7 through 10, 2007, during an extended drought period. Therefore, staff considers the results of these surveys to be highly inconclusive for the purposes of assessing potential project impacts. There was adequate rainfall in winter 2007/2008, so to complete its analysis staff needs spring 2008 protocol survey information for sensitive plants, Coachella Valley fringe-toed lizards, flat-tailed horned lizard, desert tortoise, and burrowing owls.

DATA REQUESTS

66. Please provide spring 2008 sensitive plant survey information for the following federally listed species, as well as other special-status plants within the project vicinity as identified in the application. Surveys should be conducted by a qualified and permitted biologist using California Native Plant Society Botanical Survey Guidelines.
- *Astragalus lentiginosus* var. *coachellae*, "Coachella Valley milk-vetch" occurs in Sonoran desert scrub in sandy soils and blooms between February and May.
 - *Astragalus tricarinatus*, "triple-ribbed milk-vetch" occurs in Joshua tree woodland and Sonoran desert scrub and blooms between Feb and May.
 - *Erigeron parishii*, "Parish's Daisy" occurs in Mojavean desert scrub, pinyon and juniper woodland and blooms between May and June (note: response to this item will be provided after the April 14th due date for response to Data Request #2, but should not delay publication of the Preliminary Staff Assessment).
67. Please provide the results of 2008 protocol surveys for the Coachella Valley fringe-toed lizards, flat-tailed horned lizard, desert tortoise, and burrowing owl. Surveys should be conducted by qualified and permitted biologists using full U.S. Fish and Wildlife Service recovery permit protocols. Please provide the resumes for the field biologists completing the surveys.

BACKGROUND

A site review of potential jurisdictional waters and wetlands was completed concurrently with the 2007 reconnaissance surveys for sensitive plants and wildlife. As noted in the project application, numerous difficulties can be encountered when performing delineations in dryland fluvial systems of the arid Southwest, particularly during drought

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conditions. However, staff observed several swales within the project area in October 2007. These swales did not appear to convey surface flows, but due to drought conditions evidence may not have been present. Therefore, staff needs the previous determination to be verified in March or April 2008 to take advantage of the physical and biological characteristics that may have been reestablished by winter 2007/2008 rainfall.

DATA REQUEST

68. Please conduct a jurisdictional determination of waters of the United States and waters of the State within the project site as regulated by the U.S. Army Corps of Engineers (ACOE) and Regional Water Quality Control Board (RWQCB) under Section 404 of the Clean Water Act and California Department of Fish and Game under Section 1602 of the State Fish and Game Code, respectively. Please utilize both the 1987 Corps of Engineers Wetland Delineation Manual and the 2006 Guidelines for Determinations for Waters of the United States in the Arid Southwest. Please conduct a survey determination in spring 2008 to take advantage of the winter 2007/2008 rainfall. Please provide the survey results and identify the staff completing the determination and their qualifications.

BACKGROUND

A search of the California Natural Diversity Database (CNDDDB) revealed the presence of a sensitive natural community in the vicinity of the proposed project, Mesquite Bosque along the Banning Fault. Mapped occurrences of Mesquite Bosque are generally one mile southeast of the project area. Although this sensitive community does not occur within the project area, staff needs to determine if the project would directly and/or indirectly impact the community through the use of groundwater for power plant cooling.

DATA REQUEST

69. a. Please provide a detailed assessment of the potential short and long-term effects of groundwater use by the project on the Mesquite Bosque plant community.
- b. Please provide bibliographic information on any existing research on the Mesquite Bosque in the Coachella Valley region, particularly the plant's responses to drought cycles and fluctuations in groundwater levels.

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Technical Area: Cultural Resources

Author: Michael Lerch and Dorothy Torres

Any information that identifies the location of archaeological sites needs to be submitted under confidential cover.

BACKGROUND

The AFC Supplement describes a proposed recycled water line to serve the Palm Springs National Golf Course, thereby reducing groundwater pumping (page 2). The proposed 900-foot, 12-inch-diameter recycled water line is shown in Figure 2 at a small scale. To assess potential impacts to cultural resources from the water line, the applicant's consultants conducted a records search to identify previously conducted surveys and studies, as well as previously recorded archaeological sites within a ½-mile search radius (page 8). The records search results are contained in a confidential filing. To complete its review of the records search data, staff needs additional information on the location of the pipeline, the records search area, and the records search results.

DATA REQUEST

70. Please provide a USGS 7.5-minute quadrangle map showing the proposed pipeline alignment, the records search area, and the locations of previous studies and previously recorded sites.

BACKGROUND

The applicant's consultants reviewed aerial photography of unknown age for the proposed construction area of the recycled water line and concluded that there was no exposed ground and therefore a field survey was not conducted. Staff needs to review these photographs to confirm the applicant's conclusions, and to evaluate the amount of existing development in the vicinity of the proposed pipeline. Furthermore, examination of historical aerial photographs can identify areas of cultural resource sensitivity such as sand dunes, drainages, and historical buildings and structures.

DATA REQUEST

71. Please provide copies of the aerial photographs that were examined to make the decision that no survey was needed, as well as any earlier photographs of the area that may be available.

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Technical Area: Socioeconomics

Author: Hedy Born

BACKGROUND

As a result of the Revised Water Supply Plan, the applicant has eliminated its prior proposal to upgrade the Horton Wastewater Treatment Plant (WWTP) to tertiary treatment and to purchase reclaimed water from Horton WWTP. Instead, the applicant has entered into two Memorandum of Understanding (MOU) agreements with Desert Water Agency (DWA) to fund the installation of a recycled water line to serve Palm Springs National Golf Course and irrigation controllers for a portion of existing DWA customers. In addition, Section 3.2 of the Revised Water Supply Plan (page 4) also states that the applicant will provide additional funding to DWA to potentially accelerate planned capital development of its recycled water system.

Although the Conservation Agreement's MOU is open-ended, the proposed Revised Water Supply Plan would result in changes to direct, indirect and induced economic impacts and fiscal resources of the project.

DATA REQUEST

72. Please review the estimates presented in Sections 7.8.2.2 through 7.8.2.4 (see AFC pages 7.8-8 to 7.8-10), as well as from Data Adequacy Response ID #10, and provide revised economic and fiscal impacts as needed for the following:
 - a. Total Project Capital Costs;
 - b. Estimate of Regionally Purchased Equipment and Materials (for both construction and operation);
 - c. Estimated Annual Property Taxes;
 - d. Direct Income during both construction and operation;
 - e. Secondary Income during both construction and operation;
 - f. Payroll during both construction and operation (for permanent and short-term employees);
 - g. Estimated Sales Tax;
 - h. Estimated School Impact Fees.
73. Please indicate the year for all economic dollar estimates (e.g., construction costs, construction and operation payroll, sales taxes, property taxes, school impacts fees, etc.).

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BACKGROUND

As stated in Section 5.8.1 of the Revised Water Supply Plan (page 11), construction activities for installation of the recycled water line are expected to require five workers with standard pipeline installation experience and take approximately one month to complete. There is no mention of the number of workers required for installation of irrigation controllers for existing DWA customers. In order to clarify the proposed total construction workforce and staffing schedule, please provide the following.

DATA REQUEST

74. Please address whether the five temporary workers required for pipeline installation are already considered as part of the total construction workforce. If not, please provide updated direct employment and staffing schedule tables, as needed, for Tables 7.8-9 and 7.8-10 from the AFC (pages 7.8-29 and 7.8-30).
75. Address whether additional temporary and/or full-time workers would be required to install irrigation controllers for existing DWA customers. If so, please also incorporate these workers into revised Tables 7.8-9 and 7.8-10 (see above discussion under Socioeconomics Data Request #3).
76. Discuss whether there would be any changes in secondary employment (discussed on page 7.8-10 of the AFC) during either construction and operation due to the Revised Water Supply Plan.

CPV Sentinel (07-AFC-3) Data Requests

Technical Area: Water and Soil Resources

Author: Christopher Dennis, P.G.

BACKGROUND

Conservation Program

One component of the revised water supply plan is water conservation. The water supply plan proposes to conserve 1,100 acre-feet per year (AFY) of groundwater, an amount equal to the maximum estimated amount of groundwater that will be consumed by the power plant. This conservation is proposed to be accomplished by changing the water supply of the Palm Springs National Golf Course from groundwater to secondarily treated waste water. Currently, the Desert Water Agency (DWA) Wastewater Treatment Plant (WWTP) collects and treats sanitary sewer wastewater. The secondary treated wastewater is currently conveyed to the WWTP percolation ponds for recharge to the groundwater, with some loss to evaporation. A 900-foot pipeline is proposed to be built from the WWTP to convey secondary treated wastewater to a reservoir at the golf course for use as the golf course's irrigation water.

It is estimated that conversion from using groundwater to using secondary treated wastewater would eliminate consumption of approximately 680 AFY of groundwater used for irrigation purposes at the golf course. The water supply plan asserts that this conversion from using groundwater to using secondary treated wastewater for golf course landscaping conserves available freshwater stored in the underlying aquifer.

The proposed project site is located in the Coachella Valley Groundwater Basin. Within the Coachella Valley Groundwater Basin, the proposed project site is located in the Mission Creek Sub-basin while the golf course is located in the Whitewater Groundwater Sub-basin. Therefore, water conservation will not occur in the same sub-basin from which groundwater would be pumped and used.

To make up for the difference between the 1,100 AFY of groundwater used by the power plant and the 680 AFY "conserved" groundwater currently used by the golf course, the water supply plan proposes funding the installation of enough new irrigation controllers on houses to conserve the shortfall of approximately 420 AFY of water.

DATA REQUEST

77. Describe the effects of using secondary treated wastewater at the golf course on the local groundwater supply and quality. Include a discussion of evaporative losses, evapotranspiration, changes in ground water recharge, and salt loading from wastewater percolation.
78. Please discuss and document the yearly volumes of wastewater discharged to percolation ponds for the last 10 years at the DWA WWTP.
79. Please address the projected availability of secondary (or higher quality) treated wastewater over the life of the project.

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80. Please discuss the management of the secondary treated wastewater in the reservoir at the golf course and the RWQCB requirements for treating this water prior to use.
81. Please discuss when and how the water conservation program would be implemented; and who would be the administering entity.
82. Please discuss how the conserved water would be measured, recorded, and reported, so that water conservation measures can be evaluated.
83. Please discuss how the operability of the irrigation controllers would be maintained and how continued use of these controllers would be assured over the life of the power plant operation.
84. Please discuss how funding will be ensured for maintaining the operability, use, and record keeping for the irrigation controllers.
85. Please discuss the rationale for developing a water conservation program in the Whitewater Groundwater Sub-basin rather than in the Mission Creek Sub-basin, from which groundwater would be pumped.
86. Two WWTPs are discussed in the revised water supply plan – the DWA WWTP and the City of Palm Springs WWTP. It is not clear which WWTP will be used as a source of treated wastewater. Please explain which WWTP will be used.
87. Table 1 indicates the golf course uses 1,034 AFY of water. The text of the water plan states that the golf course uses 680 AFY of water. Please explain the difference and provide documentation showing the golf course's annual water use during the last ten years.

BACKGROUND

Implementation Program

A component of the proposed water supply plan proposes to pay the replenishment costs required by the DWA and to pay DWA to recharge available surface water in an amount equal to project demand using freshwater brought into the Mission Creek Sub-basin. This water would be used to replenish groundwater extracted from wells at the project site. Existing agreements (Replenishment Program) require a replenishment fee to be paid for any groundwater pumped from the sub-basin (i.e., all pumped groundwater is metered) but do not require that the pumped groundwater be replenished on a one-to-one basis. The Implementation Program proposes purchasing freshwater from an unspecified supplier who participates in the State Water Project (SWP). Colorado River Water would be used to replenish groundwater pumped and used at the project site.

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DATA REQUEST

88. Please discuss the details that would be involved in purchasing freshwater from an unspecified participant in the SWP program. Please include in this discussion how the unspecified SWP program participant will make up for the loss of water, whether it would be a change of business, the use of groundwater, water use efficiency, etc.
89. Please discuss whether the source of water to be purchased is classified as "surplus" SWP water.
90. Please discuss the source and reliability of the water supply that will be delivered for recharge under the Implementation Program.
91. Please discuss the availability and reliability of the Colorado River water that would be used as an exchange for SWP water as proposed in the Implementation Program.
92. Please discuss whether existing agreements between the SWP Program, Metropolitan Water Agency, or any other involved party and the DWA allow purchase of this extra water, or whether there is a ceiling on the amount of water the DWA can obtain through the SWP.
93. Please provide a copy of the agreements between the applicant and DWA that ensure there is access to surplus water beyond what is required for replenishment.
94. Please describe DWA groundwater recharge facilities in the Mission Springs Sub-basin and whether they have the capacity to recharge the proposed volumes when water is available.
95. Please provide a schedule for when DWA recharge activity would occur in conjunction with the volume of water that would be recharged.
96. Please discuss the potential impacts to the physical and chemical quality of the Mission Creek groundwater when replenished by lower quality Colorado River Water.
97. Please discuss the conformance of purchasing additional SWP water for recharge of the Mission Creek Sub-basin with the April 8, 2003 Replenishment Agreement and December 7, 2004 Settlement Agreement made between the Coachella Valley Water District, the DWA, and the Mission Springs Water District.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE
STATE OF CALIFORNIA

**APPLICATION FOR CERTIFICATION
FOR THE CPV SENTINEL ENERGY
PROJECT
Power Plant Licensing Case**

**Docket No. 07-AFC-3
PROOF OF SERVICE**
(Revised 10/15/07)

INTERESTED AGENCIES

INSTRUCTIONS: All parties shall 1) send an original signed document plus 12 copies OR 2) mail one original signed copy AND e-mail the document to the web address below, AND 3) all parties shall also send a printed OR electronic copy of the documents that shall include a proof of service declaration to each of the individuals on the proof of service:

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CALIFORNIA ENERGY COMMISSION
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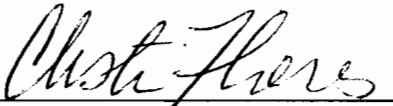
DECLARATION OF SERVICE

I, Christina Flores, declare that on March 25, 2008, I deposited copies of the attached Data Requests #2 in the United States mail at Sacramento, CA with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

OR

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.


Christina Flores