

## CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET  
SACRAMENTO, CA 95814-5512  
www.energy.ca.gov



December 21, 2007

Mr. Mark Turner, Project Manager  
Competitive Power Ventures, Inc.  
55 Second Street  
Suite 525  
San Francisco, CA 94105

<b>DOCKET</b> 07-AFC-3	
DATE	DEC 21 2007
RECD.	DEC 21 2007

Dear Mr. Turner:

Thank you for your letter dated November 27, 2007 regarding the CPV Sentinel Application for Certification (AFC) currently being reviewed by the California Energy Commission (Energy Commission). Your letter has been docketed and provided to the CPV Sentinel Siting Committee (Commissioner James Boyd and Chairman Jackalyn Pfannenstiel) as well as all parties on the project's Proof of Service list.

As noted in your letter, Energy Commission staff met with you and your project team for a pre-filing meeting on January 23, 2007. The purpose of a pre-filing meeting is for staff to discuss a project with a developer before an AFC is submitted to help the developer design a project that complies with applicable laws and policies and to identify potential issues of concern. The pre-filing meeting is a tool to help facilitate the filing of a complete application which results in a more efficient permitting process. While the staff often provides informal feedback on broad concepts being considered by the developer, such as the use of recycled water, the details and relationships presented in the application often raise issues that could not be anticipated in a short pre-filing discussion.

At the CPV Sentinel pre-filing meeting, your project team presented a power plant cooling system that utilized reclaimed water from the Mission Springs Water District's (MSWD) Horton Waste Water Treatment Plant (WWTP) through a water banking program. As described to Energy Commission staff, the CPV Sentinel project (then called CPV Ocotillo) would purchase and percolate Title 22 recycled water banked in the Mission Creek Sub-basin aquifer by the Mission Springs Water District (MSWD), and then pump out the reclaimed water for power plant operations.

The project, as we understand it today, appears different from what was explained at the pre-filing meeting. As described in the AFC, the project would pump high quality groundwater at the CPV Sentinel project site, and as mitigation, percolate secondary treated wastewater at the Horton WWTP, four (4) miles from the CPV Sentinel power plant site. This would not be a banking of water, but rather a transfer of non-potable water for potable water. Moreover, based on the draft Comprehensive Water System Master Plan (2005-URS) provided by the Mission Springs Water District, staff has identified that the recycled water proposed to mitigate the use of freshwater at the CPV

PROOF OF SERVICE (REVISED 10/15/07) FILED WITH  
ORIGINAL MAILED FROM SACRAMENTO ON 12/21/07

TP

Sentinel power plant is currently being used to recharge the area's overdrafted sub-basin. This water is already accounted for in the region's water basin calculations. Therefore, staff's preliminary view is that the net effect of the CPV Sentinel project would be to use high quality water for power plant cooling operations and cause a net loss of recharge to an over-drafted water basin.

The Energy Commission has adopted a specific policy regarding the use of fresh water in association with power plants. Specifically, the Energy Commission's 2003 Integrated Energy Policy Report (IEPR) states: the Energy Commission will approve the use of fresh water for cooling purposes by power plants which it licenses only where alternative cooling technologies are shown to be "environmentally undesirable" or "economically unsound." Based upon what we know today, staff does not believe the proposed CPV Sentinel project complies with the State Water Resources Control Board (SWRCB) and the Energy Commission's IEPR policy regarding the use of fresh inland water for power plant cooling. The AFC does not provide a persuasive argument that alternative cooling technologies are environmentally undesirable or economically unsound. Further, staff is in the process of assessing whether the project would cause a significant adverse impact to water resources in the region associated with depleting an already overdrafted water basin.

As a result, it is necessary to evaluate project alternatives that would mitigate a potential significant environmental impact and comply with LORS. Options that do not require the use of fresh inland water include those noted below. We encourage you to evaluate any other alternatives that comply with the Energy Commission's IEPR policy.

- Use of the Desert Hot Springs Sub-basin groundwater as a source of lower quality, high total dissolved solids (TDS) groundwater water.
- Use of a different inlet and inter-cooling method, such as a mechanical air-chiller with air-cooling, instead of using a wet cooling tower.

Attached are four data requests, three dealing with modeling as discussed with your technical staff on the phone, and the other a broad view of cooling alternatives. Since we are still in the discovery phase, we would like to meet with you and your consultant team in a workshop to discuss these issues and any other concerns or questions you might have. Please provide your responses to the attached data requests by January 21, 2008. If you need more time, please contact me at (916) 654-4206.

Sincerely,



Bill Pfanner, Project Manager  
California Energy Commission

Attachment

## **BACKGROUND**

These data requests replace previous data requests, # 44, 54, 55, and 61, with more focused questions. Answering the previous data requests would require extensive and complex modeling of the Mission Creek groundwater sub-basin. The focus of these data requests is limited to identifying potential impacts to nearby wells by project pumping of the groundwater over the life of the project.

## **DATA REQUEST**

62. Please provide assumptions, data, and calculations for estimating the drawdown and radius of influence of pumping groundwater at the project site over the life of the project. This information may already be available in the form of well pump tests already conducted near the project site.
63. Please identify the groundwater wells, if any, within the radius of influence.
64. Please quantify the expected observed drawdown that would result from the project's pumping of groundwater over the life of the project at the wells within the radius of pumping influence.

## **BACKGROUND**

Data Request #38 was only partly answered in the "Responses to Data Requests" dated October 4, 2007. Data Request #38 asked for a detailed discussion and analysis of the proposed use of groundwater for power plant cooling and a comparison with other options/alternatives. There were three subparts to this data request. Subparts (a) and (c) to this data request focused on air-cooling, and subpart (b) focused on the use of groundwater for power plant cooling. A detailed discussion and analysis of power plant cooling options/alternatives, other than air-cooling, was not provided.

## **DATA REQUEST**

65. Please provide a detailed discussion and analysis of alternative power plant cooling options. This discussion and analysis should focus on the economic feasibility and environmental soundness of the cooling options, and include those listed below. The applicant may be aware of options other than those listed below that are equally or more feasible and sound; if so, please provide an analysis of these alternatives.
  - Use of the Desert Hot Springs Sub-basin groundwater as a source of lower quality, high total dissolved solids (TDS) groundwater water.
  - Use of a different inlet and inter-cooling method, such as a mechanical air-chiller with air-cooling, instead of using a wet cooling tower.

**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***

**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:

CALIFORNIA ENERGY COMMISSION  
Attn: Docket No. 07-AFC-3  
1516 Ninth Street, MS-4  
Sacramento, CA 95814-5512  
[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

**APPLICANT**

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

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**DECLARATION OF SERVICE**

I, Terry Piotrowski, declare that on December 21, 2007, I deposited copies of the attached Letter to Mark Turner of Competitive Power Ventures, Inc. 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.

**Original Signed by**  
**Terry Piotrowski**