

## CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET  
SACRAMENTO, CA 95814-5112

February 7, 2008

Tom Mulvihill, General Manager  
Indian Wells Valley Water District  
500 West Ridgecrest Boulevard  
P. O. Box 1329  
Ridgecrest, CA 93556-1329

<b>DOCKET</b> 07-AFC-5	
DATE	FEB 07 2008
RECD.	FEB 28 2008

**Re: Water Requirements for Solar Thermal Power Plants and the Indian Wells Valley—Response to your January 8, 2008**

Dear Mr. Mulvihill:

Thank you for contacting us with your concerns regarding the potential use of water for cooling of solar power plants in the Indian Wells Valley. We share your concerns and understand that in your valley, and throughout much of the state, local demand for groundwater often exceeds natural recharge. Recognizing that water is a precious and scarce resource, the California Energy Commission adopted a policy on the use of water for power plant cooling in 2003. This policy presumes that future power plants would use air or water with limited beneficial uses for cooling unless these designs are found to be economically unreasonable or environmentally unsound.

In your letter you identify a number of power plants in Nevada and California that are cooled by air rather than water. This is the outcome our water policy encourages. Whether solar or gas-fired, power plants with wet cooling towers use substantial amounts of water. To date, the following air-cooled natural-gas fired projects have been approved, or are under review, by the Energy Commission: Crockett Cogeneration, Otay Mesa, Sutter Power Plant, Colusa Generation Station, El Segundo Repower, Gateway, San Gabriel Generation Station, Carlsbad, Eastshore Energy Center, and Humboldt Bay Repower. Ivanpah Solar and Carrizo Solar Farm, two air-cooled solar projects, are also under review by the Energy Commission.

We are actively engaged with power plant developers early in their planning process to inform them of our various policies and to discuss potential project-related issues. Prior to the project developer filing an application with the Energy Commission, we visit their proposed site(s), research the issues, and discuss critical concerns with them. One of the biggest issues is conforming to the Energy Commission's water policy. We have seen a decided shift from water-cooled to air-cooled facilities since the adoption of the water policy. However, project developers are not prohibited from filing an application seeking approval of a facility that uses groundwater water for cooling. When such a project is proposed, we analyze the project for potential environmental impacts and its conformance with laws, regulations, ordinances, and standards. We encourage water purveyors to become involved in our licensing process and often secure valuable information and data from water districts to assist in our analysis of water use and waste water disposal methods.

Tom Mulvihill, General Manager

Page 2

The Energy Commission encourages your active participation and input into our licensing process and places great weight on the opinions of local, state, and federal agencies as well as local water purveyors such as Indian Wells Valley Water District. Your involvement will be useful in evaluating the merits of future projects planned for the Indian Wells Valley and surrounding environs, and implementing the Energy Commission water use policy that encourages air-cooled power plant designs.

Again, thank you for writing to us and outlining your concerns. If you have any questions, please contact Dale Edwards, Environmental Office Manager at (916) 654-5139 or [dedwards@energy.state.ca.us](mailto:dedwards@energy.state.ca.us).

Sincerely,

A handwritten signature in black ink, appearing to read 'Melissa Jones', written in a cursive style.

MELISSA JONES  
Executive Director

cc: Honorable Jean Fuller, California State Assembly Member  
Honorable Roy Ashburn, California State Senator  
Honorable Jon McQuiston, Kern County Supervisor  
Harvey Rose, City Manager, City of Ridgecrest  
Mike Pool, Director, California State Office, Bureau of Land Management  
Hector Villalobos, Ridgecrest Field Office Manager, Bureau of Land Management  
Ted James, Director, Kern County Planning Department  
Jack Caswell, Project Manager, California Energy Commission  
Bill Pfanner, Project Manager, California Energy Commission  
Mike Smith, Assistant Director, Governmental Affairs, California Energy Commission  
Dale Edwards, Environmental Office Manager, California Energy Commission