

CALIFORNIA ENERGY COMMISSION

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

**DOCKET**
07-AFC-3

DATE 10/22/08

October 22, 2008

RECD. 10/22/08

Dear Librarian:

**DOCUMENT HANDLING OF THE FINAL STAFF ASSESSMENT
FOR THE CPV SENTINEL ENERGY PROJECT
APPLICATION FOR CERTIFICATION (07-AFC-3)**

The enclosed Final Staff Assessment (FSA) contains the California Energy Commission staff's final engineering and environmental evaluation of the proposed CPV Sentinel Energy Project. Please make this FSA available for those who may wish to be informed about the project. We request that you not allow the FSA or any of its contents to be removed from the library. To increase accessibility of the document, we ask, if possible, that you cross reference it as a general reference work under the title and author categories, as well as under such subjects as "Energy Commission," "electricity energy/generation," "power plant siting," or any other relevant subject. Please retain the enclosed letter to the public behind the front cover of the FSA.

The Energy Commission's siting process is open to the public and incorporates the input of the public as well as local, state and federal agencies. To facilitate public participation in our review process, the Commission distributes copies of staff documents such as the FSA to public libraries in communities near the proposed project, and in major cities throughout the state.

Thank you for your cooperation. If you have any questions, please contact John Kessler, Project Manager, at (916) 654-4679, or by e-mail at: jkessler@energy.state.ca.us

Sincerely,

Original Signature in Dockets

EILEEN ALLEN

Siting and Compliance Office Manager

Enclosure

CALIFORNIA ENERGY COMMISSION

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SACRAMENTO, CA 95814-5512
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October 22, 2008

To: MEMBERS OF THE PUBLIC

**PUBLIC PARTICIPATION IN THE REVIEW OF THE CPV SENTINEL ENERGY PROJECT
FINAL STAFF ASSESSMENT (07-AFC-3)**

The enclosed Final Staff Assessment (FSA) contains the California Energy Commission staff's final engineering and environmental evaluation of the CPV Sentinel Energy Project (CPV Sentinel) Application for Certification (07-AFC-3). The FSA was published on October 10, 2008.

With the exception of Air Quality which is currently undetermined, staff believes that as currently proposed, including the applicant's and the staff's proposed mitigation measures and the staff's proposed conditions of certification, the CPV Sentinel project would comply with all applicable laws, ordinances, regulations, and standards (LORS). Staff's preliminary conclusions (with the exception of Air Quality) are that significant adverse direct, indirect or cumulative impacts are not likely to occur in any of the other technical areas. The issues that staff has identified as either being complex or undetermined, are summarized as follows:

Air Quality

A significant development occurred since the time that staff prepared the Preliminary Staff Assessment affecting the applicant's plans for mitigating project air emissions. The applicant can no longer purchase emission reduction credits from the South Coast Air Quality Management District's Priority Reserve because of a recent ruling from the Superior Court of Los Angeles County. In response to a lawsuit filed by the Natural Resources Defense Council and other groups, the court decided to prevent the District from making emission reduction credits in the Priority Reserve available to power plants without conducting more analysis under the California Environmental Quality Act (CEQA). Therefore, staff cannot complete its Air Quality analysis to determine whether the project would avoid significant adverse impacts and would conform to LORS with respect to Air Quality. Staff expects to prepare and file supplemental analysis and testimony for Air Quality at such time as the applicant identifies its proposed emission reduction credits.

Soil and Water

With respect to the potential for significant impacts associated with the project's extraction of groundwater, staff believes the applicant's proposal to import new water into the Mission Creek Groundwater Sub-basin (MCGS) for recharge at 108% of the project's use would avoid contributing to the depletion of groundwater in a basin that is already in overdraft. In addition, to ensure that there are no temporary effects on other groundwater users in the basin, staff has proposed a number of conditions of certification that require recharge activities to occur on a schedule that results in no change in groundwater levels at residential wells and the 330-acre Willow Hole Conservation Area, which hosts several state and federally-protected plant and animal species.

With respect to the project's conformance with LORS including the Energy Commission's 2003 IEPR policy on water use for power plant cooling, the CPV Sentinel project as proposed would accomplish conservation of a greater quantity of water than the project would use (approximately 150% of the project's maximum water use, and 300% of the project's average water use). Although staff remains concerned that water conserved under the Water Supply Plan is not of a higher quality than the project's source of supply, staff notes that the Water Supply Plan would result in conservation of fresh water far in excess of that conserved in two previous siting cases, the Panoche Energy Center and Starwood-Midway projects, which would conserve 109% and 100+% of higher quality water respectively, compared to those projects' maximum annual water use. Given that the Energy Commission has found that conservation of a higher quantity and quality of water can be used to support a finding of compliance with the policy, staff concluded that it is reasonable to find that conservation of a significantly greater quantity of water than used by the project can also support a finding of conformity with the policy.

Background

On June 25, 2007, CPV Sentinel, LLC submitted an Application for Certification (AFC) to the California Energy Commission to construct and operate a simple-cycle (peaking) power plant. The CPV Sentinel Energy project (CPV Sentinel) is a proposed nominally rated 850 megawatt (MW) electrical generating facility that would encompass 37 acres of land situated within unincorporated Riverside County, California, adjacent to the Palm Springs northern city limits. The proposed project consists of eight natural gas-fired General Electric (GE) LMS100 combustion turbine generators (CTGs) operating in simple-cycle mode. The project will supply quick-start peaking capacity, energy, and ancillary services into the California Independent System Operator's (CAISO) Los Angeles Basin Local Capacity Requirement Area. The CAISO has identified this region as one needing additional peaking capacity to meet resource adequacy requirements and ensure grid reliability.

The proposed project site is located approximately 1.3 miles east of State Route (SR) 62 (also referred to as Twentynine Palms Highway), 1.7 miles north of Interstate 10 (I-10), and 1.3 miles west of Indian Avenue. Powerline Roads North and South run along the south side of the property. Access to the site would be available from Dillon Road north onto the proposed access road to the project site. Access to Dillon Road is from the Dillon Road exit off SR 62 and from the Indian Avenue exit off I-10. The power plant, transmission lines, and portions of the gas line and construction laydown area would be located within unincorporated Riverside County. Portions of the construction laydown area and portions of the proposed gas line route would be located within the city of Palm Springs. The site is situated approximately 8 miles northwest of the center of Palm Springs and 4.5 miles west of the center of Desert Hot Springs.

The 37-acre proposed power plant site is currently vacant. The surrounding area is primarily characterized by industrial use with extensive development of wind energy and transmission infrastructure. The Devers substation is approximately 700 feet to the west of

the proposed project site, and the Indigo Energy Facility is approximately 1.8 miles to the southeast. The proposed power plant site is zoned W2 (Controlled Development Area) and designated as PF (Public Facilities) in the Riverside County General Plan. Electrical power-generating facilities are permitted uses within this zoning district and General Plan designation.

Electricity generated by the proposed project would be delivered to the existing Southern California Edison (SCE) Devers substation via a 2,300-foot-long transmission line connecting the project switchyard to the Devers substation at the 230 kilovolt (kV) bus. It is currently anticipated that SCE will execute a separate tie-line agreement with CPV Sentinel, LLC under which SCE will be responsible for final design, engineering, construction, ownership, operation, and maintenance of the transmission line to the Devers Substation. SCE will seek a Certificate of Public Convenience and Necessity (CPCN) from the California Public Utilities Commission for the line.

The applicant would be responsible for construction of a 3,200-foot-long road extending off Dillon Road to the project site and associated intersection widening at Dillon Road and the site access road. Fuel would be supplied to the project site via a 2.6-mile-long, 24-inch-diameter natural gas line extending from the existing Indigo Energy Facility to the CPV Sentinel site.

Potable water for the proposed project would be supplied from either onsite groundwater wells or from a 3,200-foot-long potable water supply line extension to the project site from a current Mission Springs Water District's municipal line existing along Dillon Road. The on-site wells would supply groundwater for both potable and process needs at the CPV Sentinel site. Under the proposed Water Supply Plan, the project would pump groundwater via on-site or nearby wells within the Mission Creek Sub-basin. As defined in the applicant's Revised Water Supply Plan (AFC Supplement), groundwater used by the CPV Sentinel project would be replenished through the importation of water in accordance with the applicant's proposed Implementation Agreement. Conservation of water would occur at a greater quantity than the project would consume through its Conservation Agreement. Both agreements are with the Desert Water Agency. The proposed project would use a zero liquid discharge (ZLD) system, comprised of membrane-based wastewater treatment processes (microfiltration and reverse osmosis) coupled with a crystallizer system. This process would result in zero liquid wastewater discharge from the site.

The Energy Commission is responsible for reviewing and ultimately approving or denying all applications for construction and operation of thermal electric power plants, 50 MW and greater, proposed for construction in California. The Energy Commission's facility certification process carefully examines public health and safety, environmental impacts and engineering aspects of proposed power plants, and all related facilities such as electric transmission lines and natural gas and water pipelines. The Energy Commission is the lead agency under the California Environmental Quality Act (CEQA), and produces several environmental and decision documents rather than an Environmental Impact Report.

The FSA contains the California Energy Commission staff's environmental and engineering evaluation of the CPV Sentinel project and will serve as staff's testimony during evidentiary hearings. The Energy Commission Committee assigned to the CPV Sentinel proceedings will consider and weigh the testimony, comments, or recommendations of all interested parties, including Energy Commission staff, the applicant, interveners, public, and other local, state, and federal agencies, before issuing the Presiding Member's Proposed Decision (PMPD) for consideration by the full Energy Commission. The public, interveners, local, state and federal agencies are encouraged to participate in these hearings. The Energy Commission has scheduled the first hearing for 9:00 AM on November 3, 2008 in Hearing Room A of the Energy Commission in Sacramento as announced in a separate notice.

If you desire information on participating in the Energy Commission's review of the project, please contact Elena Miller, the Energy Commission's Public Adviser, at (916) 654-4489 or toll free in California at (800) 822-6228, or by email at: pao@energy.state.ca.us. Technical or project schedule questions should be directed to John Kessler, Energy Commission Project Manager, at (916) 654-4679, or by email at: jkessler@energy.state.ca.us. If you need reasonable accommodation in terms of assistance, please contact Lourdes Quiroz of the Administrative Services Division at (916) 654-5146, or e-mail Lourdes at lquiroz@energy.state.ca.us. The status of the project, copies of notices, and other relevant documents are also available on the Energy Commission's Internet web site at: <http://www.energy.ca.gov/sitingcases/sentinel/index.html>. News media inquiries should be directed to Assistant Director, Susanne Garfield, at (916) 654-4989, or by email at: mediaoffice@energy.state.ca.us.

Note: Please retain this letter behind the front cover of the FSA. Thank You.