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

November 29, 2007

Dear Librarian:

DOCUMENT HANDLING FOR THE VICTORVILLE 2 HYBRID POWER PROJECT (07-AFC-1)

The enclosed Preliminary Staff Assessment (PSA) contains the California Energy Commission staff's initial engineering and environmental evaluation of the proposed Victorville 2 Hybrid Power Project. Please make this PSA available for those who may wish to be informed about the project. We request that you not allow the PSA 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 PSA.

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 PSA 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,

Roger E. Johnson
Siting and Compliance Office Manager

Enclosure

CALIFORNIA ENERGY COMMISSION
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To: MEMBERS OF THE PUBLIC

PUBLIC PARTICIPATION IN THE REVIEW OF VICTORVILLE 2 HYBRID POWER PROJECT PRELIMINARY STAFF ASSESSMENT (07-AFC-1)

The enclosed Preliminary Staff Assessment (PSA) contains the California Energy Commission staff's initial engineering and environmental evaluation of the proposed Victorville 2 Hybrid Power Project (Victorville 2). Staff finds that the Victorville 2 project would comply with all applicable laws, ordinances, regulations and standards. Staff's preliminary conclusions are also that significant adverse direct, indirect or cumulative impacts are not likely to occur, although there are five technical areas in which staff is continuing its analysis, which are summarized as follows:

- Air Quality - Staff believes that the project emission impacts can be mitigated to a level of insignificance with the emission reduction and priority reserve credits defined by current rules, subject to the mitigation remaining available to the project as it undergoes legal challenges.
- Biology – Staff has tentatively determined that the project will meet all mitigation requirements, but awaiting additional information that will be provided when the federal Biological Opinion are completed and issued by U.S. Fish and Wildlife Service. This permit will address habitat compensation ratios related to desert tortoise and Mohave ground squirrel, the potential need for tortoise exclusion fencing, and the adequacy of proposed plant relocation areas and programs.
- Cultural Resources – The applicant will be providing in early December 2007 additional cultural resource field surveys that have been conducted on a portion of Segment 3 of the transmission line and along the route of the proposed potable/backup process water pipeline. When the survey data is received, staff will be able to complete its review of the project, which based on information provided to date indicates the project would not have a significant impact on known archaeological or ethnographic resources.
- Soil and Water – The applicant will be providing additional stormwater plans and calculations that are expected to resolve outstanding stormwater management issues. Staff will continue to explore its tentative conclusion that the project's use of reclaimed water will neither exacerbate the overdraft in the Mojave Groundwater Basin nor compromise the ability of Victor Valley Water Reclamation Authority to meet its obligations under the Memorandum of Understanding with CDFG for maintenance of flows in the Mojave River.
- Traffic and Transportation – Staff is further exploring two potential impacts to aviation traffic and safety that could affect operations at the Southern California Logistics Airport (SCLA). The first relates to the potential for glare from the solar collector thermal arrays to distract or cause temporary vision impairment to pilots.

The second relates to the potential turbulence effect on U.S. Army helicopters from the project's turbine and cooling tower thermal plumes, if the arrival and departure traffic patterns to the north of the SCLA were to remain unaltered.

On February 28, 2007, the city of Victorville submitted an Application for Certification (AFC) to construct and operate the Victorville 2 Hybrid Power Project (Victorville 2), a hybrid of natural gas-fired combined cycle generating equipment integrated with solar thermal generating equipment, in the city of Victorville, San Bernardino County. The proposed Victorville 2 project would have a net electrical output of 563 megawatts (MW), with construction planned to begin in summer of 2008 and commercial operation planned by summer of 2010. Victorville 2 is designed to use solar technology to generate a portion of the project's output and thereby support the State of California's goal of increasing the percentage of renewable energy supplies. Primary equipment for the generating facility would include two natural gas-fired combustion turbine-generators (CTGs) rated at 154 MW each, two heat recovery steam generators (HRSGs) with duct firing, one steam turbine-generator (STG) rated at 268 MW, and 250 acres of parabolic solar-thermal collectors with associated heat transfer equipment. The solar-thermal collectors would contribute up to 50 MW of the STG's 268 MW output, and with plant auxiliary loads of about 13 MW, Victorville 2's net output would be 563 MW.

Construction of the proposed Victorville 2 would require three areas that total 388 acres, located immediately north of the Southern California Logistics Airport (SCLA) which is the site of the former George Air Force Base. Including the land required for the solar collectors, the footprint of the power plant would require grading of approximately 338 acres, and construction laydown would require two separate temporary areas of 20 and 30 acres each. The project site is situated approximately 3.5 miles east of Highway 395 and approximately 0.5 mile west of the Mojave River.

The proposed Victorville 2 facility would connect via a single-circuit three-phase 230-kV transmission line to the power grid through Southern California Edison's (SCE's) existing Victor Substation, located approximately 10 miles south-southwest of the proposed Victorville 2 Project site. Segment 1 of the overhead line, consisting of new steel poles and conductor, would run approximately 4.3 miles in a new right-of-way beginning at the southern boundary of the proposed Victorville 2 plant site and extending southeastward to a point along SCE's existing High Desert Power Project - Victor right-of-way. Segment 2 extends from this point for 5.7 miles to SCE's existing Victor Substation, and would consist of primarily installing conductor on existing towers having space available for a second circuit, except for three locations where new towers would be needed to cross under existing SCE transmission lines. To accommodate the proposed Victorville 2, segment 3 involves increasing the capacity of the existing SCE system between SCE's Victor Substation and Lugo Substation, for a distance of approximately 11 miles south of the Victor Substation. This would require the relocation of 6.6 miles of an existing 115 kV transmission line within the same ROW, and installing new steel poles or lattice towers and conductor for 11 miles of the proposed 21-mile long 230-kV Victorville 2 project transmission line.

Natural gas would be delivered to the project through the Kern River-High Desert Power Project Lateral. The existing 24-inch natural gas pipeline runs adjacent to the southwestern corner of the proposed Victorville 2 site. The project would install a new 12-inch natural gas line to connect with the existing 24-inch line at a point adjacent to the southwest corner of the proposed site and extending approximately 450 feet beyond the boundary.

Process water needs would be met by the use of reclaimed water supplied by the Victor Valley Wastewater Reclamation Authority (VVWRA) via a new 1.5 mile, 14-inch pipeline extending from the reclaimed water production system at the VVWRA treatment plant located southeast of the proposed site. On an annual basis, the proposed Victorville 2 project would consume a maximum of about 3,150 acre-feet/year of reclaimed water for power plant processes, primarily serving cooling demand using an evaporative (wet) cooling tower and including use for parabolic mirror washing in the solar field. Potable water would be supplied to the proposed project by a new onsite well, serving drinking, sanitary and other washing needs, and requiring up to 3.6 acre-feet/year. Process wastewater would be treated using a zero liquid discharge system, separating water for reuse from solids in the form of brine that would be processed into solids for landfill disposal. Sanitary waste would be sent to the VVWRA treatment plant in a new 1.25-mile sanitary wastewater line.

Air emissions from the combustion of natural gas in the CTGs and duct burners of the HRSGs would be controlled using best available control technology applied to their exhaust. Oxides of nitrogen (NOx) from the CTG's stack emissions would be controlled by dry low-NOx combustors followed by a selective catalytic reduction system using aqueous ammonia in the HRSGs. An oxidation catalyst located within each HRSG would also control carbon monoxide (CO) and volatile organic compounds (VOC). In order to be considered for licensing by the Energy Commission, the project would be required to conform with rules and regulations of the Mojave Desert Air Quality Management District and be issued a Determination of Compliance from the Air District.

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 Energy Commission staff will conduct a publicly noticed workshop to discuss the PSA on December 11, 2007 at the Southern California Logistics Airport. The workshop will be separately noticed. Based on the workshop, written comments received on the PSA, and additional information that will be gathered, the Energy Commission staff will

revise the PSA and issue a Final Staff Assessment. The public and local, state and federal agencies are encouraged to participate. Written comments should be provided to John Kessler, Project Manager, by December 21, 2007, at the address on this letterhead or by email to jkessler@energy.state.ca.us.

If you desire information on participating in the Energy Commission's review of the project, please contact the Energy Commission Public Adviser's Office, at (916) 654-4489 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/victorville2. News media inquiries should be directed to Assistant Director, Claudia Chandler, at (916) 654-4989, or by email at: mediaoffice@energy.state.ca.us.

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