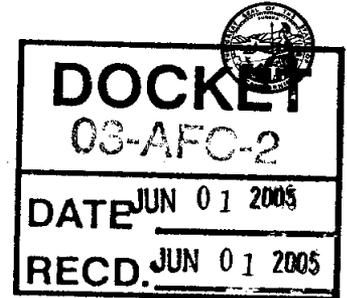


CALIFORNIA ENERGY COMMISSION

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



June 1, 2005

Dear Librarian:

**DOCUMENT HANDLING FOR THE LOS ESTEROS CRITICAL ENERGY FACILITY
PHASE 2 FINAL STAFF ASSESSMENT (03-AFC-2)**

The enclosed Final Staff Assessment (FSA) contains the California Energy Commission staff's independent environmental and engineering evaluation of the Los Esteros Critical Energy Facility Phase 2, an application to modify the current license for this existing power plant located in San Jose, CA. 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 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, or attach a copy to the CD version of that document.

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 Bob Eller, acting Project Manager, at (916) 651-8851, or by e-mail at: beller@energy.state.ca.us

Sincerely,

Roger E. Johnson
Siting and Compliance Office Manager

Mailed to list no. 7191
Enclosure

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
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June 1, 2005

To: MEMBERS OF THE PUBLIC**PUBLIC PARTICIPATION IN THE REVIEW OF LOS ESTEROS CRITICAL ENERGY FACILITY PHASE 2 FINAL STAFF ASSESSMENT (03-AFC-2)**

The enclosed Final Staff Assessment (FSA) contains the California Energy Commission staff's independent environmental and engineering evaluation of the Los Esteros Critical Energy Facility Application for Certification, Phase 2 (LECEF, Phase 2), for the conversion of LECEF to combined-cycle operation. The FSA recommends conditions that would allow the Energy Commission to license the project. The staff concludes that the site must be rezoned to allow the simple-cycle power plant to be upgraded with no unmitigated impacts to the environment, public health or the transmission system.

The Los Esteros Critical Energy Facility (LECEF) was originally licensed by the Energy Commission on July 2, 2002, as a simple-cycle natural gas-fired power plant. This license was issued under the emergency provisions of Public Resources Code section 25552, which requires relicensing of a project or conversion to combined-cycle operation within three years of the original license date. The project is owned and operated by the Los Esteros Critical Energy Facility, LLC, a wholly-owned subsidiary of Calpine. The owner requested two actions with this application (03-AFC-2): Phase 1 seeks a recertification of the license for the existing 180 megawatt (MW) simple-cycle facility for the life of the project, usually considered to be 30 years; and Phase 2 seeks a license to convert the LECEF to combined-cycle operation, adding equipment that will increase the output by 140 MW to a generating capacity of 320 MW. The Energy Commission approved the recertification of the simple-cycle license, Phase 1 of LECEF 2, on March 16, 2005 (CEC 800-2005-002-CMF). This FSA is the Energy Commission staff's independent analysis of the LECEF, Phase 2 application.

Located in north San Jose, Santa Clara County, at 800 Thomas Foon Chew Way, the project is a fenced 21-acre site within a 34-acre parcel. Thomas Foon Chew Way is a 2,700 foot private access road from Zanker Road curving through the adjacent buffer lands leading east to the project site and the Silicon Valley Power (SVP) Switching Station and Pacific Gas & Electric (PG&E) Los Esteros Substation from Zanker Road. The area is currently zoned light-industrial, and the parcel is covered by a proposed development zone designation specifically allowing the current power plant with a 180 MW output. No additional zoning action was required for Phase 1 recertification. However, for Phase 2, the City of San Jose is in the process of amending the zoning limitations on the parcel that limit the output of the project to 180 MW. Phase 2's application for conversion to combined-cycle operation would add 140 MW, for a total of 320 MW.

The project site is fenced on all sides with the south and east bounded by a sound wall on an elevated berm. The San Jose/Santa Clara Water Pollution Control Plant (WPCP)

is across Zanker Road to the northwest of the site. The larger site is bounded on the west by city buffer lands, and Zanker Road, and on the north by a strip of land on which Silicon Valley Power (SVP) has a newly-constructed 230 kV switching station, and the PG&E Los Esteros Substation. Undeveloped buffer lands and the WPCP sludge drying ponds lie further north of the project. The southern 13 acres of the parcel lie outside the fence line of the power plant and are bordered by Alviso-Milpitas Road and State Route 237.

The current LECEF is powered by four LM6000 combustion turbine generators (CTGs) with spray intercooling injection (SPRINT) to enhance power and operates with selective catalytic reduction (SCR) to reduce carbon monoxide and nitrous oxide (NO_x) emissions. The project was designed to accommodate conversion to combined-cycle operation, and the four housings for the heat recovery steam generator equipment (HRSG's) and combustion exhaust stacks were constructed as part of the original project. The HRSGs also contain the equipment for the SCR emissions reduction systems. LECEF utilizes recycled water from the South Bay Water Recycling Program (SBWR) through one 18-inch diameter line, 1,500 feet in length, connecting with the SBWR recycled water main located in the City of San Jose's buffer lands west of the LECEF. LECEF returns used wastewater back to the WPCP facility through a wastewater collection pipeline to the west at Zanker Road. Electricity from LECEF is currently delivered to the grid through an interconnection to the PG&E 115 kV Los Esteros Substation-Nortech line at a point adjacent to the plant access road. The electricity interconnection for Phase 2 will be through two new 115/230 kV step-up transformers to be located in the LECEF switchyard and connecting to the SVP 230 kV switching station via two 200-foot long overhead wires. Natural gas is supplied through a 550 foot-long 10-inch diameter line connecting to PG&E lines 101 and 109 located to the south and adjacent to State Route 237. Storm water run-off from the facility is collected and discharged to the Coyote Creek high-flow channel to the west. Completion of the discharge line, scheduled for 2005, will direct the stormwater run-off to the Coyote Creek low-flow channel.

The Energy Commission is responsible for reviewing and ultimately approving or denying all 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 the LECEF power plant and all related facilities such as electric transmission lines, natural gas pipelines and water pipelines. The Energy Commission is the lead agency under California Environmental Quality Act for the LECEF.

The Energy Commission will conduct a publicly noticed Prehearing Conference to schedule Evidentiary Hearings in the near future. The Prehearing Conference will be separately noticed. All parties and the public will have the opportunity to provide comments on the FSA during the Prehearing Conference and at future Commission hearings. Interested citizens and local, state and federal agency representatives are encouraged to participate.

If you desire information on participating in the Energy Commission's review of the project, please contact Ms. Margret J. Kim, the Energy Commission's Public Adviser, 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 Bob Eller, acting Energy Commission Project Manager, at (916) 651-8851, or by email at: [beller@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/losesteros2>]. News media inquiries should be directed to the Media Office, at (916) 654-4989, or by email at: [mediaoffice@energy.state.ca.us].

Note: Please retain this letter behind the front cover of the Final Staff Assessment. Thank You.