

**CALIFORNIA ENERGY COMMISSION**

1516 NINTH STREET  
SACRAMENTO, CA 95814-5512

DATE: October 3, 2003

TO: Interested Parties

FROM: Ila Lewis, Compliance Project Manager

SUBJECT: **Otay Mesa Project (99-AFC-5C)  
Public Review of Staff Analysis of Proposed Project Modifications  
(Separate and Increase Stack Height of HRSG/Turbine, Add Duct  
Firing and Small Auxiliary, Boiler)**

On September 28, 2002, the California Energy Commission (Energy Commission) received a petition from the Otay Mesa Generating Company, LLC (now Calpine Corporation) to modify the Otay Mesa Generating Project (OMGP).

The Otay Mesa Generating Project is a 510 megawatt, combined cycle, natural gas-fired power plant that is under construction. The facility is located in Otay Mesa in San Diego County.

Calpine proposes to separate the turbine and heat recovery steam generator (HRSG) exhaust stacks and increase stack height from 144 feet to 160 feet, add duct firing capability to the HRSG to increase output during peak demand periods to 600 MW, clarify use of an oxidation catalyst for air emission reduction, add a small boiler in order to provide steam for auxiliary purposes, add a wet surface air condenser; and revise emission rates related to start up and shutdown operations. These modifications to the facility design will improve the performance and reliability of the facility.

Energy Commission staff reviewed the proposed petition and assessed the impacts of this proposal on environmental quality, public health and safety. All environmental and engineering technical areas potentially impacted by the proposed petition have been reviewed. The staff has recommended changes to conditions of certification in the areas of air quality, biological resources, and facility design. The petition seeks to modify air quality conditions of certification in order to mitigate impacts and clarify equipment changes. The petition also seeks to modify biological resources conditions to increase compensation to the Quino Checkerspot Butterfly Research Endowment, if required, due to potential increase in nitrogen deposition. In addition the petition also seeks to modify the facility design condition of certification GEN-2 to modify Table 1 (Major Structures and Equipment) to include the auxiliary boiler.

Staff proposes revisions to existing Air Quality Conditions of Certification AQ-5 through AQ-65 and the addition the San Diego County Air Pollution Control District (SDCAPCD) Conditions of Certification AQ-80 through AQ-88 and staffs recommendation for the addition of Conditions AQ-77 through AQ-79. Biological Resources staff have determined that two new Conditions of Certification need to be added, Bio-13 and Bio-

Interested Parties

October 3, 2003

Page 2

14, which address any future modeled nitrogen increases that will effect the Quino checkerspot research endowment. Facility Design staff recommends changes to Table 1 (Major Structures and Equipment) in GEN-2 to include the auxiliary boiler. It is the Energy Commission staff's opinion that, with the implementation of the revised and new conditions, the project will remain in compliance with applicable laws, ordinances, regulations, and standards and that the proposed modifications will not result in a significant adverse direct or cumulative impact to the environment (Title 20, California Code of Regulations, Section 1769).

The analyses for air quality, biological resources, and facility design are attached for your information and review. Energy Commission staff intends to recommend approval of the petition at the October 22, 2003 Business Meeting of the Energy Commission. If you have comments on this proposed project change, please submit them to me at the address above prior to October 17, 2003. If you have any questions, please call me at (916) 654-4678 or e-mail at [ilewis@energy.state.ca.us](mailto:ilewis@energy.state.ca.us).

Attachment